ORDER NO. HAD8704076C9

Service Manual

Stereo Integrated Amplifier

Amplifier

SU-X880

Color

(K) . . . . Black Type

Color	Areas
(K)	[EX] . . . . Continental Europe
(K)	[EH] . . . . Holland
(K)	[EB] . . . . Belgium
(K)	[EF] . . . . France
(K)	[EK] . . . . United Kingdom
(K)	[EG] . . . . F.R. Germany
(K)	[EW] . . . Switzerland
(K)	[Ei] . . . . . Italy
(K)	[XL] . . . . Australia
(K)	[XA] . . . . Asia, Latin America, Middle Near East, Africa & Oceania
(K)	[PA] . . . . East PX.
(K)	[PE] . . . . European Military
(K)	[XB] . . . . Saudi Arabia

SPECIFICATIONS

(DIN 45 500)

■ AMPLIFIER SECTION

DIN power output
1 kHz THD: 1% 2 × 80W (8Ω)
Total harmonic distortion
rated power at 1 kHz 1% (8Ω)
half power at 1 kHz 0.007% (8Ω)
Residual hum and noise 0.2 mV
Damping factor 30 (8Ω)
Input sensitivity and impedance
PHONO 3 mV/47kΩ
TUNER, CD, AUX, TAPE 1, TAPE 2 200 mV/22kΩ
Maximum input voltage (1 kHz, RMS)
PHONO 120 mV
S/N (rated power 8Ω)
PHONO 75 dB (IHF, A, 79 dB)
TUNER, CD, AUX, TAPE 1, TAPE 2 82 dB (IHF, A: 83 dB)
Frequency response
PHONO RIAA standard curve ±0.8 dB (30 Hz~15 kHz)
TUNER, CD, AUX, TAPE 1, TAPE 2 10 Hz~60 kHz (−3 dB)
Tone controls
BASS 50 Hz, +10 dB~−10 dB
TREBLE 20 kHz, +10 dB~−10 dB
Muting −20 dB
Super bass 70 Hz, +10 dB
Output voltage
TAPE 1, TAPE 2, REC OUT 200 mV
Channel balance, AUX 250 Hz~6,300 Hz ±1.0 dB
Channel separation, AUX 1 kHz 60 dB
Headphones output level and impedance 590 mV/330Ω
Load impedance
MAIN or REMOTE 8Ω~16Ω
SURROUND 8Ω~16Ω

■ GENERAL

Power consumption 370W
Power supply
For continental Europe AC 50 Hz/60 Hz, 220V
For others AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D) 360 × 128 × 303 mm (14-3/16" × 5-1/32" × 11-30/32")
Weight 7.7 kg (17 lb.)

Note:
Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Specifications are subject to chnge without notice for further improvement.

■ CONTENTS

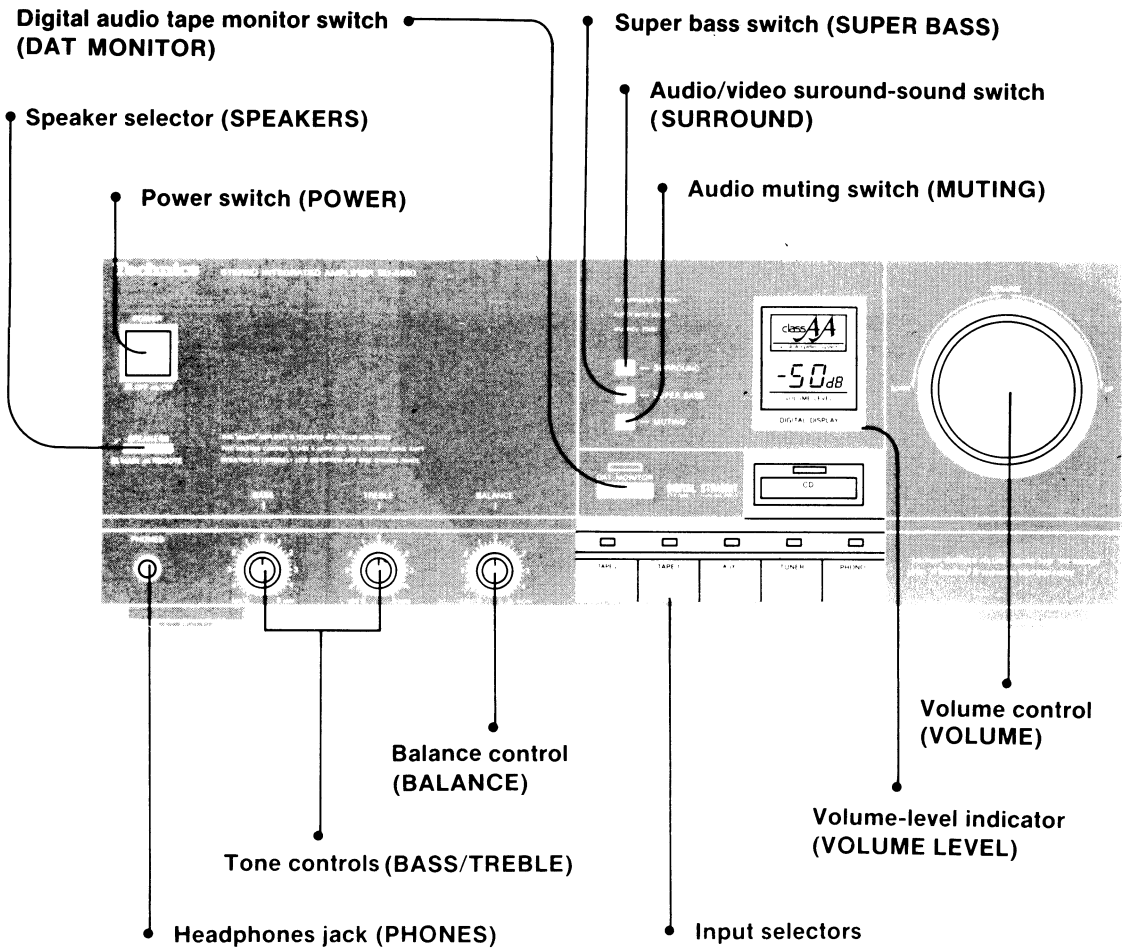
	Page
LOCATION OF CONTROLS	2
ACCESSORY	2
CONNECTION	3
PROTECTION CIRCUITRY	3
BEFORE REPAIR AND ADJUSTMENT	3
DISASSEMBLY INSTRUCTIONS	4, 5
FUNCTION OF IC TERMINAL	6
RESISTORS & CAPACITORS	7, 8
BLOCK DIAGRAM	9 ~ 11
SCHEMATIC DIAGRAM	12 ~ 21
WIRING CONNECTION DIAGRAM	22 ~ 24
PRINTED CIRCUIT BOARDS	25 ~ 29
MEASUREMENTS AND ADJUSTMENT	30
REPLACEMENT PARTS LIST	31, 32
EXPLODED VIEW	33, 34

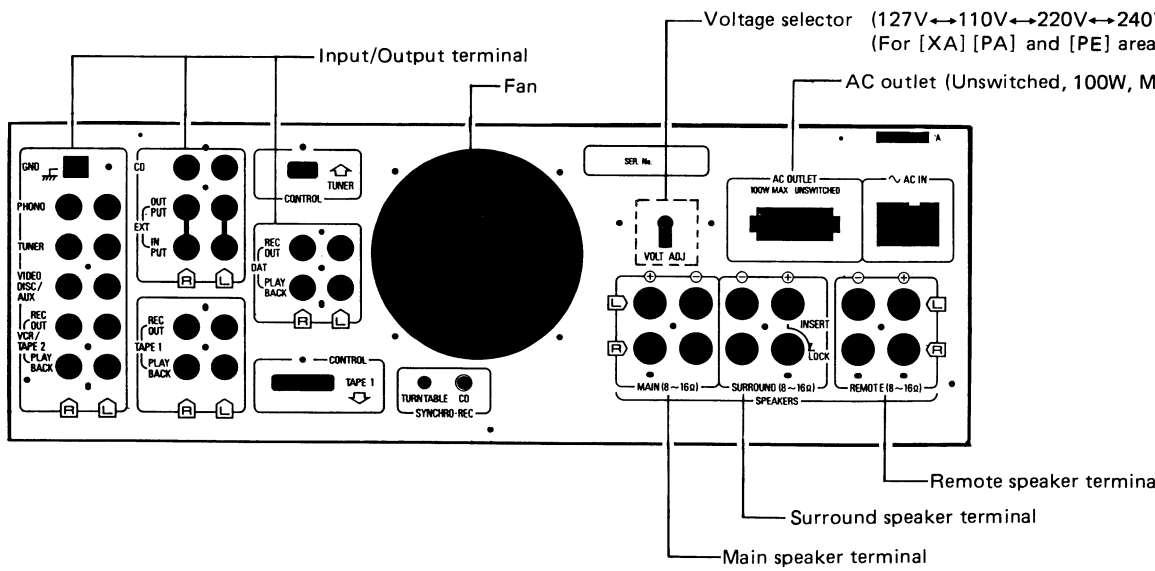
Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
6th Floor, World Trade Center Bldg.,
No. 4-1, Hamamatsu-cho 2-Chome, Minato-ku,
Tokyo 105, Japan

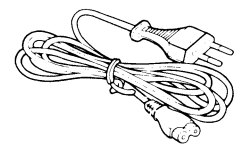
■ LOCATION OF CONTROLS





■ ACCESSORY

- AC power supply cord 1



■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"
SOME CHASSIS COMPONTS MAY HAVE SHARP EDGES. BE CAREFUL WHEN DISASSEMBLING AND SERVICING.

Ref. No. 1	How to remove the cabinet
Procedure 1	1. Remove the 4 screws from both sides of the cabinet and the 2 screws from its back.

Ref. No. 2	How to remove the front panel
Procedure 1 →2	

1. Remove the 3 screws (❶ ~ ❸) from the front panel.
2. Remove the connector (J401B).

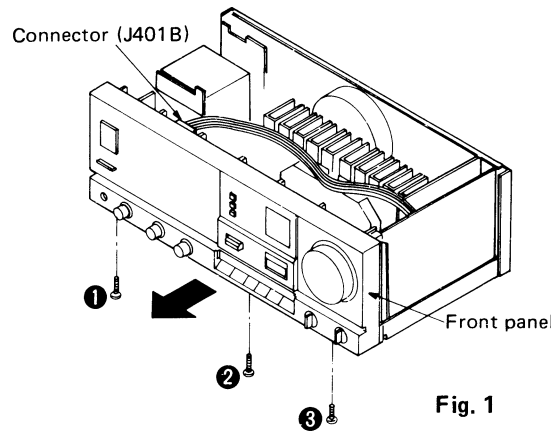


Fig. 1

Ref. No. 3	How to remove the headphone jack P.C.B. and microcomputer/FL P.C.B.
Procedure 1 →2 →3	

1. Remove the balance, treble and bass knobs, as well as their respective nuts (❶ ~ ❸).
2. Remove the deck A and deck B knobs, as weel as their respective nuts (❹, ❺) and washers (❻, ❼)
3. Remove the 2 screws (❽, ❾) from the microcomputer/FL P.C.B., and undo the 2 tabs.
4. Remove the 2 screws (❿, ⓫) from the headphone jack P.C.B.

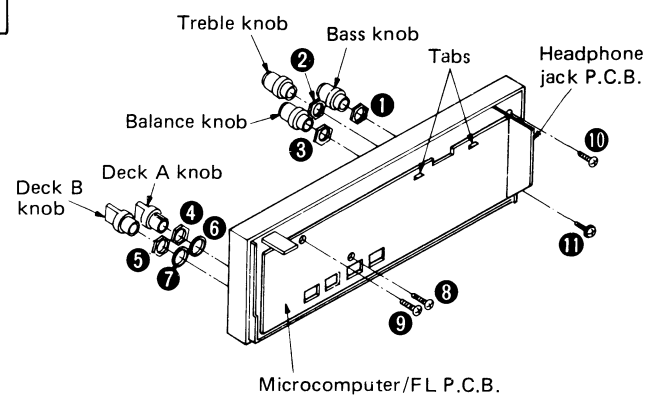


Fig. 1

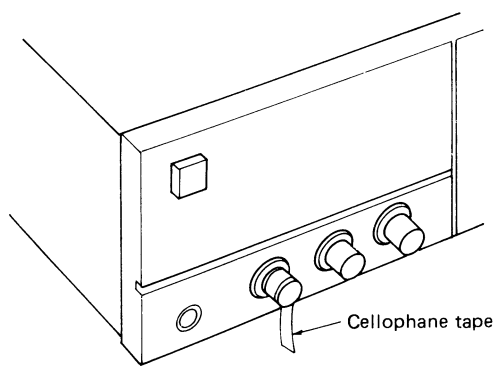


Fig. 2

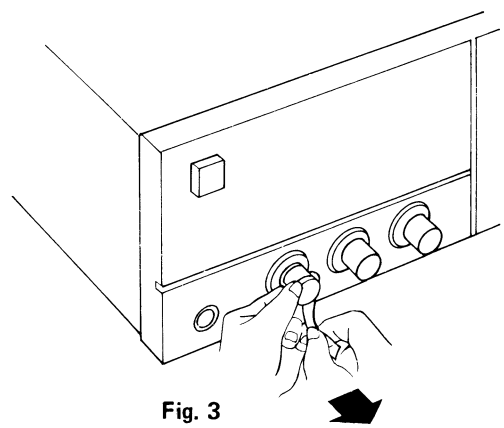


Fig. 3

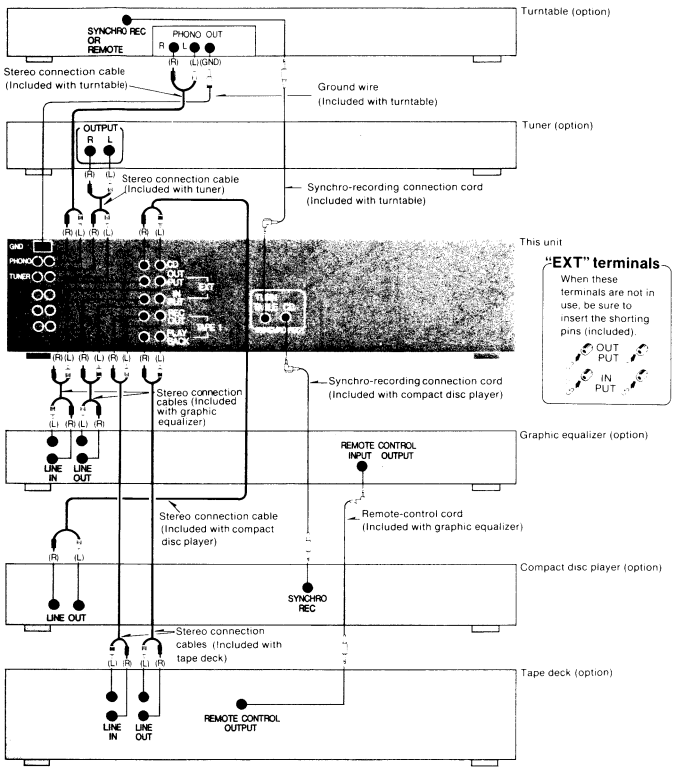
Remove the knob

Wind cellophane tape arround the knob and put it the direction of the arrow as shown in Fig. 2 and Fig. 3.

■ CONNECTION

1. Make the connections of the stereo connection cables, the synchro-recording connection cords, and the remote-control cords.

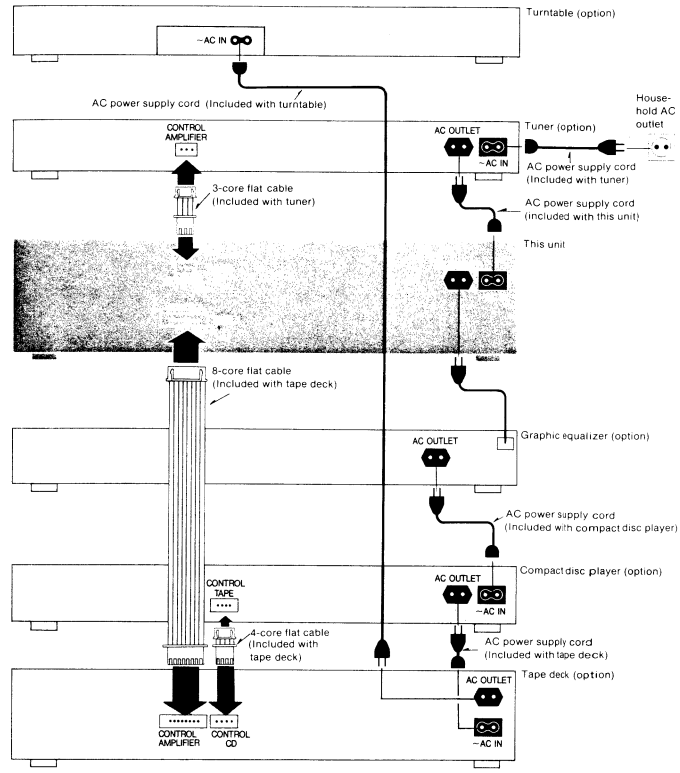
Note:
Although the synchro-recording connection cords and the remote-control cords are differentiated in the figure below, actually they are the same shape.


Turntable (option)
SYNCHRO REC OR REMOTE
PHONO OUT
Stereo connection cable (Included with turntable)
Ground wire (Included with turntable)
Tuner (option)
OUTPUT
Stereo connection cable (Included with tuner)
Synchro-recording connection cord (Included with turntable)
This unit
"EXT" terminals
When these terminals are not in use, be sure to insert the shorting pins (included).
OUT PUT
IN PUT
Synchro-recording connection cord (Included with compact disc player)
Stereo connection cables (Included with graphic equalizer)
Graphic equalizer (option)
REMOTE CONTROL INPUT OUTPUT
LINE IN
LINE OUT
Stereo connection cable (Included with compact disc player)
Remote-control cord (Included with graphic equalizer)
Compact disc player (option)
SYNCHRO REC
LINE OUT
Stereo connection cables (Included with tape deck)
Tape deck (option)
LINE IN
LINE OUT
REMOTE CONTROL OUTPUT

2. Make the connections of the flat cables and the AC power supply cords.

1. Do not connect video-related equipment (such as a TV, etc.) to the power outlets of these components. (These outlets are especially for audio equipment.) Also do not exceed the indicated (as shown in the figure) power ratings when connecting to these outlets.
2. The tuner's power outlet is interlocked with the power 'STAND BY ○ ON' switch of the tuner.
3. If the graphic equalizer is not used in combination with these components, connect the AC power supply cord of the compact disc player to the AC outlet of the amplifier. If the compact-disc player is not used in combination with these components, connect the AC power supply cord of the cassette tape deck to the AC outlet of the graphic equalizer.

Note: The configurations of the AC outlets and AC power supply cords differ according to area.



■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

■ BEFORE REPAIR AND ADJUSTMENT

(1) Turn off the power supply. Using a 10Ω, 5W resistor, shortcircuit both ends of power supply capacitors ((C701,C702) in order to discharge the voltage.

(2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50Hz/60Hz in NO SIGNAL mode should be shown below with respect to supply voltage 110V/127V/220V/240V.

Power supply voltage		AC110V	AC127V	AC220V	AC240V
Consumed current	50Hz	210 ~ 630mA	195 ~ 585mA	106 ~ 320mA	98 ~ 294mA
	60Hz	199 ~ 597mA	184 ~ 552mA	100 ~ 302mA	93 ~ 279mA

Ref. No. 4	How to remove the volume control and switch P.C.B.
Procedure 1 → 2 → 3 → 4	

1. Remove the volume knob and the nut (❶).
2. Remove the 6 screws (❷ ~ ❼) from the switch P.C.B.

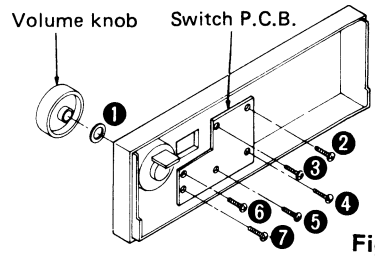


Fig. 1

Ref. No. 5	How to remove the main P.C.B., power IC and constant-voltage transistor
Procedure 1 → 2 → 5	

1. Remove the 8 screws (❶ ~ ❽) from the rear panel.
2. Remove the 3 screws (❾ ~ ⓫) from the main P.C.B.
3. Remove the 2 screws (⓬ , ⓭) from the heat-sink.

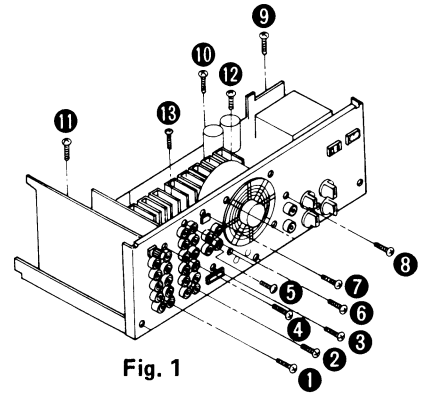


Fig. 1

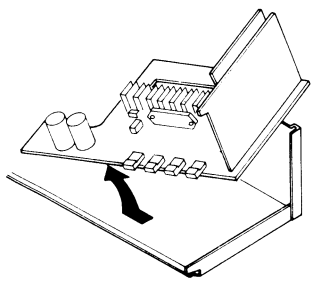


Fig. 3

4. Unsolder the power IC and the constant-voltage transistor.
5. Remove the 2 screws (⓮ , ⓯) from the power IC.
6. Remove the screw (⓰) from the constant-voltage transistor.

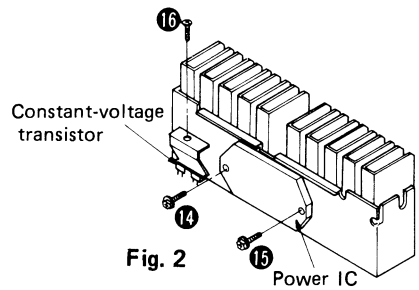


Fig. 2

7. When mounting the power IC and the constant-voltage transistor, apply silicone grease (SZ0GYG6260) over their constant areas.

Ref. No. 6	How to remove the cooling fan motor
Procedure 1 → 6	

1. Remove the 4 screws (❶ ~ ❹) and the connector.

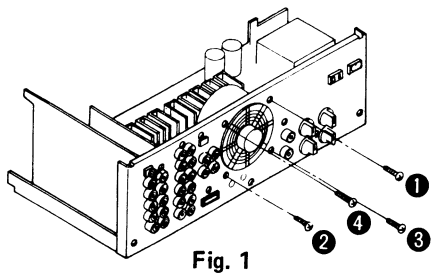


Fig. 1

2. Insert a screwdriver at the root of the cooling fan. it out of the motor shaft.

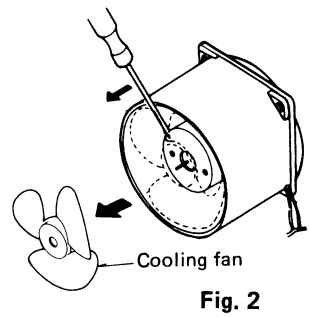


Fig. 2

3. Remove the motor cover.
4. Remove the motor from the fan casing.
5. When mounting the fan motor, align the fan casing's projection with the hole of the fan motor.

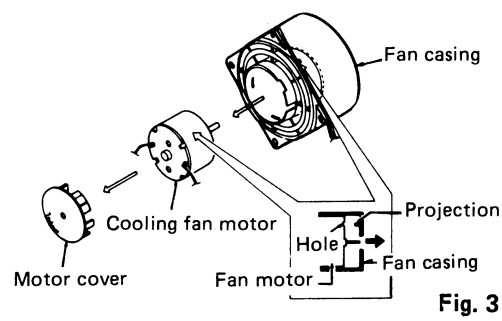


Fig. 3

■ FUNCTION OF IC TERMINAL • IC601 (LC6554D–3230)

Pin No.	Symbol	Function Description
1 ~ 4	G0 ~ G3	Grid drive output for digital multi-display (FL).
5 ~ 7	S0 ~ S2	Key matrix output.
10 ~ 13	K0 ~ K3	Key matrix input.
8	S3	Not used.
9	POWER ON	Not used.
14	VR0	Rotary encoder input of volume control (VR601).
15	VR1	
16	CSO	Not used.
17	HALT	Input for power detection.
18	CS1	Not used.
19	AMP	Input for power detection.
20	AMP POWER	Not used.
21	$\overline{CUT}$	Input selector noise cut muting output.
22	$\overline{S.ON}$	Not used.
23	$\overline{DTS}$	Not used.
24	$\overline{LVTR}$	LED selector display (VTR) output.
25	$\overline{LTA}$	LED selector display (TAPE) output.
26	$\overline{LVD}$	LED selector display (VIDEO DISC/AUX) output.
27	$\overline{LCD}$	LED selector display (CD) output.
28	$\overline{LTU}$	LED selector display (TUNER) output.
29	$\overline{LPH}$	LED selector display (PHONO) output.
30	TEST	Not used.
31	V_{SS}	Grounding.
32	OSC1	Clock oscillation input/output.
33	OSC2	
34	$\overline{RES}$	Reset signal input.
35	ST	ST signal control output
36	DATA	DATA signal control output.
37	CK	CK signal control output.
38	$\overline{REM}$	Remote control data input.
39	$\overline{DCD}$	Deck control output.
40	$\overline{SID}$	ST, CK and DATA signal control.
41	$\overline{SYPH}$	Player synchronized recording input.
42	$\overline{SYCD}$	CD synchronized recording input.
43	SY OUT	Deck synchronized recording output.
44	$\overline{START}$	Player STOP/START signal output.
45	$\overline{STOP}$	
46	$\overline{REC}$	Deck on-recording signal input.
47	$\overline{PH}$	Input selection by phono unit signal. (Direct operation input.)
48	$\overline{TU}$	Input selection by tuner unit signal. (Direct operation input.)
49	$\overline{CD}$	Input selection by CD unit signal. (Direct operation input.)
50	$\overline{DECK}$	Input selection by tape unit signal. (Direct operation input.)
51	V_P	Power supply.
52 ~ 60	S0 ~ S8	Digital multi-display (FL) output.
61	S music	Not used.
62	S movie	
63	S mono	
64	V_{DD}	Power supply.

Key matrix output / Key matrix input:

Input \ Output	5	6	7
10	S603 VIDEO DISC/AUX	S612 MUTE	S608 BALANCE(R)
11	—	—	S607 BALANCE(L)
12	S602 TUNER	S605 VTR/TAPE 2	—
13	S601 PHONO	S604 TAPE 1	—

■ RESISTORS & CAPACITORS

Notes: * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

Numbering System of Resistor

Example

ERD	25	F	J	102
Type	Wattage	Shape	Tolerance	Value

ERX	2	AN	J	471
Type	Wattage	Shape	Tolerance	Value 47×10^1 (ohm)

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity

ECEA	50	M	330
Type	Voltage	Peculiarity	Value $(33 \times 10^0$ microfarad)

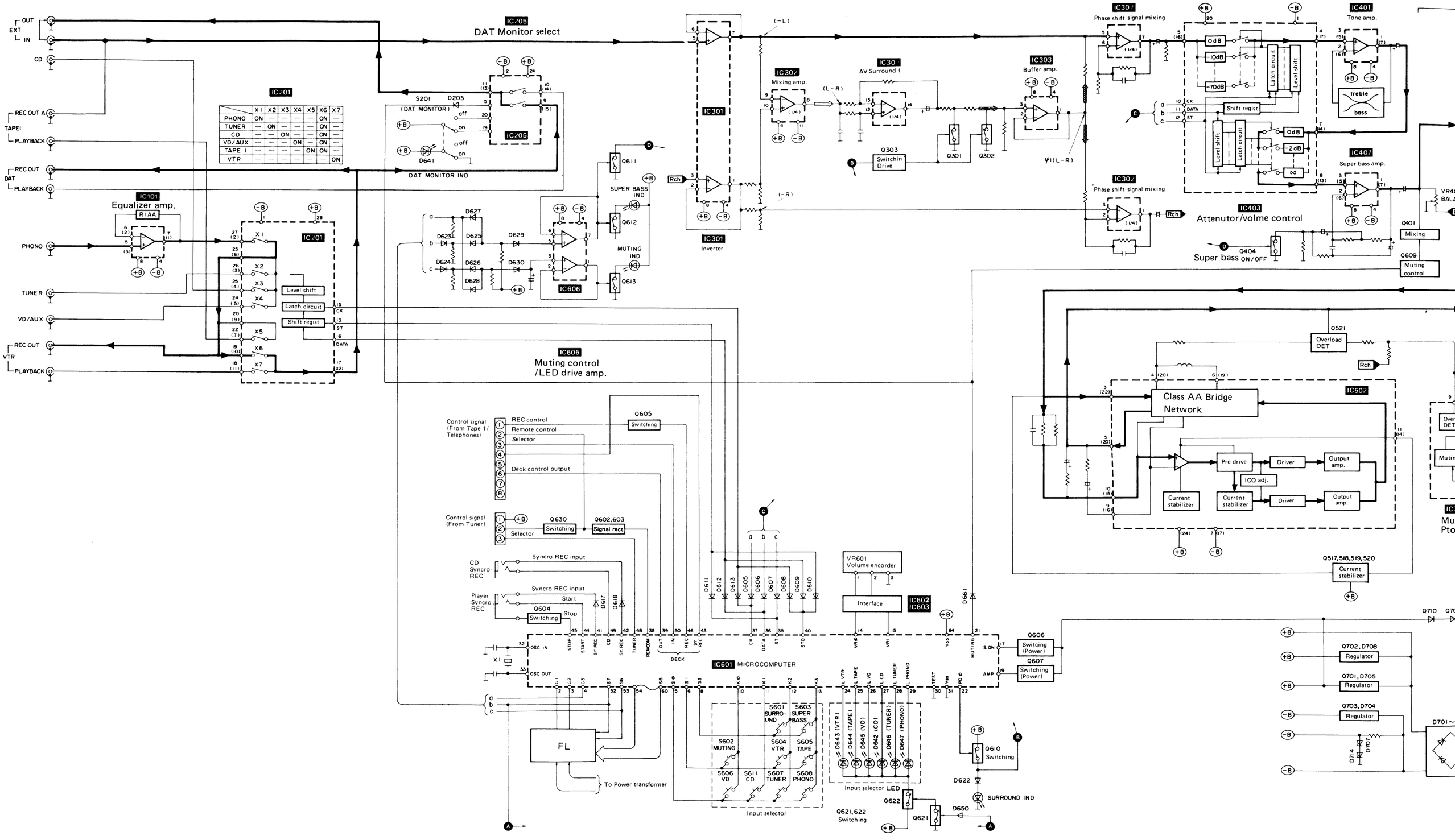
Resistor Type	Wattage	Tolerance
ERD : Carbon ERG : Metal Oxide ERX : Metal Film ERQ : Fuse Type Metal ERD□ L : Carbon (chip) ERO□ K : Metal Film (chip) ERC : Solid	10 : 1/8W 12 : 1/2W 25 : 1/4W 1A : 1W 18 : 1/8W S2 : 1/4W S1 : 1/2W 2F : 1/4W 50 : 1/2W 2A : 2W	J : ±5% F : ±1% G : ±2% K : ±10%

Capacitor Type	Voltage	Tolerance
ECE : Electrolytic ECCD : Ceramic ECKD : Ceramic ECQM : Polyester ECQP : Polyproylene ECG : Ceramic ECEA□□□N: Non Polar Electrolytic QCU□ : Ceramic (Chip Type) ECUX : Ceramic (Chip Type) ECF : Semiconductor EECW : Liquid electrolyte double layer capcitor	0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1H : 50V 1V : 35V 50 : 50V 05 : 50V 2H : 500V 2A : 100V 1 : 100V KC : 400V AC KC : 125VAC (UL) 1J : 63V	C : ±0.25pF J : ±5% K : ±10% Z : +80% −20% P : +100% −0% M : ±20% D : ±0.5pF G : ±2%

Ref. No.	Part No.	Part Code
RESISTORS		
R101, R102 [EG]	ERDS2TJ471	
R103, R104	ERDS2TJ391	001 152 2360 6
R105, R106	ERDS2TJ224	001 152 2433 6
R107, R108	ERDS2TJ563	001 152 2446 1
R109, R110	ERDS2TJ221	001 152 2431 8
R111, R112	ERDS2TJ680	001 152 2448 9
R113, R114	ERDS2TJ184	001 152 2588 8
R115, R116	ERDS2TJ123	001 152 2424 7
R117, R118	ERDS2TJ563	001 152 2446 1
R119, R120	ERDS2TJ102	001 152 2346 4
R201, R202	ERDS2TJ102	001 152 2346 4
R201, R202 [EG]	ERDS2TJ222	
R203, R204	ERDS2TJ102	001 152 2346 4
R203, R204 [EG]	ERDS2TJ222	
R205, R206	ERDS2TJ102	001 152 2346 4
R207, R208	ERDS2TJ102	001 152 2346 4
R209, R210	ERDS2TJ152	001 152 2350 8
R219	ERDS2TJ182	001 152 2352 6
R220, R221	ERDS2TJ562	001 152 2445 2
R222	ERDS2TJ562	001 152 2445 2
R229	ERDS2TJ102	001 152 2346 4
R229 (EG)	ERDS2TJ222	001 152 2353 5
R230	ERDS2TJ102	001 152 2346 4
R230 (EG)	ERDS2TJ222	001 152 2353 5
R231	ERDS2TJ102	001 152 2346 4
R231 (EG)	ERDS2TJ222	001 152 2353 5
R232	ERDS2TJ102	001 152 2346 4
R232 (EG)	ERDS2TJ222	001 152 2353 5
R235	ERDS2TJ102	001 152 2346 4
R235 (EG)	ERDS2TJ222	001 152 2353 5
R236	ERDS2TJ102	001 152 2346 4
R236 (EG)	ERDS2TJ222	001 152 2353 5
R237	ERDS2TJ102	001 152 2346 4
R237 (EG)	ERDS2TJ222	001 152 2353 5
R238	ERDS2TJ102	001 152 2346 4
R238 (EG)	ERDS2TJ222	001 152 2353 5
R239	ERDS2TJ102	001 152 2346 4
R239 (EG)	ERDS2TJ222	001 152 2353 5
R240	ERDS2TJ102	001 152 2346 4
R240 (EG)	ERDS2TJ222	001 152 2353 5
R241	ERDS2TJ102	001 152 2346 4
R241 (EG)	ERDS2TJ222	001 152 2353 5
R242	ERDS2TJ102	001 152 2346 4
R242 (EG)	ERDS2TJ222	001 152 2353 5
R248	ERDS2TJ273	001 152 2436 3
R249	ERDS2TJ103	001 152 2347 3
R250	ERDS2TJ333	001 152 2358 0
R251, R252	ERDS2TJ103	001 152 2347 3
R253	ERDS2TJ103	001 152 2347 3
R263, R264	ERDS2TJ104	001 152 2348 2
R265, R266	ERDS2TJ104	001 152 2348 2
R267, R268	ERDS2TJ104	001 152 2348 2
R301	ERDS2TJ102	001 152 2346 4
R301 (EG)	ERDS2TJ222	001 152 2353 5
R302	ERDS2TJ102	001 152 2346 4
R302 (EG)	ERDS2TJ222	001 152 2353 5
R303	ERDS2TJ102	001 152 2346 4
R303 (EG)	ERDS2TJ102	001 152 2346 4
R304	ERDS2TJ102	001 152 2346 4
R304 (EG)	ERDS2TJ102	001 152 2346 4
R305, R306	ERDS2TJ223	001 152 2432 7
R307	ERDS2TJ393	001 152 2440 7
R308	ERDS2TJ223	001 152 2432 7
R309, R310	ERDS2TJ332	001 152 2357 1
R311	ERDS2TJ223	001 152 2432 7
R312	ERDS2TJ393	001 152 2440 7
R313, R314	ERDS2TJ223	001 152 2432 7
R315	ERDS2TJ223	001 152 2432 7
R316	ERDS2TJ562	001 152 2445 2
R317	ERDS2TJ822	001 152 2455 0
R318, R319	ERDS2TJ562	001 152 2445 2
R320	ERDS2TJ224	001 152 2433 6
R321	ERDS2TJ473	001 152 2363 3
R322	ERDS2TJ104	001 152 2348 2
R322 (EG)	ERDS2TJ104	001 152 2348 2
R323	ERDS2TJ103	001 152 2347 3
R324, R326	ERDS2TJ332	001 152 2357 1
R327, R328	ERDS2TJ332	001 152 2357 1
R329, R330	ERDS2TJ332	001 152 2357 1
R331, R331	ERDS2TJ104	001 152 2348 2
R332	ERDS2TJ104	001 152 2348 2
R332 (EG)	ERDS2TJ104	001 152 2348 2
R403, R404	ERDS2TJ224	001 152 2433 6
R407, R408	ERDS2TJ474	001 152 2443 4
R409, R410	ERDS2TJ822	001 152 2455 0
R413, R414	ERDS2TJ473	001 152 2363 3
R415, R416	ERDS2TJ182	001 152 2352 6
R417, R418	ERDS2TJ562	001 152 2445 2
R419, R420	ERDS2TJ474	001 152 2443 4
R421, R422	ERDS2TJ223	001 152 2432 7
R423, R424	ERDS2TJ392	001 152 2439 0
R425, R426	ERDS2TJ182	001 152 2352 6
R427, R428	ERDS2TJ821	001 152 2454 1
R429, R430	ERDS2TJ273	001 152 2436 3
R433, R434	ERDS2TJ104	001 152 2348 2
R437, R438	ERDS2TJ224	001 152 2433 6
R439, R440	ERDS2TJ332	001 152 2357 1
R441, R442	ERDS2TJ103	001 152 2347 3
R443, R444	ERDS2TJ103	001 152 2347 3
R445, R446	ERDS2TJ222	001 152 2353 5
R447, R448	ERDS2TJ392	001 152 2439 0
R451	ERDS2TJ122	001 152 2423 8
R452, R453	ERDS2TJ103	001 152 2347 3
R454	ERDS2TJ681	001 152 2449 8
R455	ERDS2TJ222	001 152 2353 5
R456	ERDS2TJ153	001 152 2351 7
R458	ERDS2TJ393	001 152 2440 7
R503	ERDS2TJ102	001 152 2346 4
R503 (EG)	ERDS2TJ102	001 152 2346 4
R504	ERDS2TJ102	001 152 2346 4
R504	ERDS2TJ102	001 152 2346 4

Ref. No.	Part No.	Part Code
R505, R506	ERDS2TJ473	001 152 2363 3
R507, R508	ERDS2TJ272	001 152 2354 4
R509, R510	ERDS2TJ473	001 152 2363 3
R511	ERD2FCG470	001 152 0197 7
R512	ERDS2TJ823	001 152 2456 9
R513, R514	ERDS2TJ561	001 152 2364 2
R515, R516	ERD25FJ470	001 152 0309 7
R531, R532	ERDS2TJ182	001 152 2352 6
R533, R534	ERDS2TJ391	001 152 2360 6
R535, R536	ERDS2TJ332	001 152 2357 1
R537, R538	ERDS2TJ332	001 152 2357 1
R539, R540	ERDS2TJ223	001 152 2432 7
R541, R542	ERDS2TJ223	001 152 2432 7
R543, R544	ERDS2TJ332	001 152 2357 1
R545, R546	ERD25FJ101	001 152 0214 3
R547, R548	ERD25FJ101	001 152 0214 3
R549, R550	ERD25FJ2R2	001 152 0251 8
R551, R552	ERD25FJ2R2	001 152 0251 8
R553, R554	ERD25FJ6R8	001 152 0335 5
R571, R572	ER0S2TKF4220	001 151 5927 2
R573, R574	ER0S2TKF1000	001 151 5727 8
R575, R576	ER0S2TKF1000	001 151 5727 8
R577, R578	ERD2FCG271	001 152 6537 3
R579, R580	ERDS2TJ271	001 152 2435 4
R581, R582	ERDS2TJ153	001 152 2351 7
R583, R584	ERDS1FJ100	001 152 2612 5
R585, R586	ERDS2TJ472	001 152 2362 4
R587, R588	ERD25FJ100	001 152 0213 4
R589, R590	ERG1ANJ331	001 151 0062 6
R605	ERDS2TJ224	001 152 2433 6
R606	ERDS2TJ223	001 152 2432 7
R608	ERDS2TJ224	001 152 2433 6
R610, R611	ERDS2TJ470	001 152 2442 5
R612, R613	ERDS2TJ470	001 152 2442 5
R614, R615	ERDS2TJ470	001 152 2442 5
R616, R617	ERDS2TJ470	001 152 2442 5
R618, R619	ERDS2TJ470	001 152 2442 5
R620	ERDS2TJ562	001 152 2445 2
R625, R626	ERDS2TJ223	001 152 2432 7
R627, R628	ERDS2TJ223	001 152 2432 7
R629, R630	ERDS2TJ153	001 152 2351 7
R631, R632	ERDS2TJ473	001 152 2363 3
R638, R639	ERDS2TJ101	001 152 2421 0
R640	ERDS2TJ330	001 152 2355 3
R642, R643	ERDS2TJ221	001 152 2431 8
R644, R645	ERDS2TJ221	001 152 2431 8
R646	ERDS2TJ221	001 152 2431 8
R660, R661	ERDS2TJ103	001 152 2347 3
R669, R670	ERDS2TJ223	001 152 2432 7
R671, R672	ERDS2TJ223	001 152 2432 7
R673	ERDS2TJ223	001 152 2432 7
R674	ERDS2TJ822	001 152 2455 0
R675, R676	ERDS2TJ223	001 152 2432 7
R678, R679	ERDS2TJ222	001 152 2353 5
R680	ERDS2TJ222	001 152 2353 5
R681, R682	ERDS2TJ223	001 152 2432 7
R683, R684	ERDS2TJ104	001 152 2348 2
R685	ERDS2TJ151	001 152 2426 5
R686, R687	ERDS2TJ221	001 152 2431 8
R688, R689	ERDS2TJ221	001 152 2431 8
R690	ERDS2TJ152	001 152 2350 8
R691, R692	ERDS2TJ103	001 152 2347 3
R693, R694	ERDS2TJ102	001 152 2346 4
R695	ERDS2TJ103	001 152 2347 3
R696	ERDS2TJ472	001 152 2362 4
R701, R702	ERD2FCG100	001 152 0185 1
R703, R704	ERDS2TJ682	001 152 2365 1
R705	ERD2FCG100	001 152 0185 1
R706	ERDS2TJ103	001 152 2347 3
R707	ERDS2TJ222	001 152 2353 5
R708	ERDS2TJ682	001 152 2365 1
R709	ERDS2TJ103	001 152 2347 3
R710	ERDS1FJ102	001 152 2614 3
R721, R722	ERDS2TJ223	001 152 2432 7
R723, R724	ERDS2TJ223	001 152 2432 7
R725	ERDS1FJ181	001 152 2621 4
R726	ERDS2TJ562	001 152 2445 2
R727	ERDS2TJ153	001 152 2351 7
R728	ERDS2TJ103	001 152 2347 3
R731, R732	ERDS2TJ473	001 152 2363 3
R733	ERDS2TJ153	001 152 2351 7
R734	ERDS2TJ684	001 152 2451 4
R735	ERDS2TJ104	001 152 2348 2
R735 (EG)	ERDS2TJ104	001 152 2348 2
R736	ERDS2TJ223	001 152 2432 7
R737	ERG1ANJ681	001 151 0086 8
R810	ERDS2TJ101	001 152 2421 0
CAPACITORS		
C101, C102 (EG)	RCBS1H180JLY	
C103, C104 (EG)	RCBS1H151KBY	
C105, C106	ECEA1HPS3R3	001 120 6064 3
C107, C108	RCBS1H101KBY	001 103 5569 4
C109, C110	ECFTD102KXL	001 108 0371 1
C111, C112	ECEA0JPS330	001 120 6059 0
C113, C114	ECFTD223KXL	001 108 0342 6
C115, C116	ECFTD682KXL	001 108 0363 1
C117, C118	ECEA1HPS3R3	001 120 6064 3
C119, C120	ECEA1CKS100	001 120 2600 7
C121, C122	ECBT1E103ZF5	001 103 8080 2
C201, C202 (EG)	RCBS1H101KBY	001 103 5621 7
C203, C204 (EG)	RCBS1H101KBY	001 103 5621 7
C209, C210 (EG)	RCBS1H101KBY	001 103 5569 4
C211, C212 (EG)	RCBS1H101KBY	001 103 5569 4
C221, C222 (EG)	RCBS1H101KBY	001 103 5569 4
C223, C224	ECBT1E103ZF5	001 103 8080 2
C235	ECEA1HKR47	001 120 0338 0
C237, C238 (EG)	RCBS1H101KBY	001 103 5569 4
C301, C302 (EG)	RCBS1H101KBY	001 103 5569 4
C303, C304	RCBS1H101KBY	001 103 5569 4
C305, C306	ECBT1E103ZF5	001 103 8080 2
C307	RCBS1H180JLY	001 103 5592 5
C308	ECFTD104KXL	001 108 0793 3
C309	ECBT1E103ZF5	001 103 8080 2
C311	ECEA1EK3R3B	001 120 0292 7
C312	ECEA1EK3R3E	001 120 6273 6
C313, C314	RCBS1H820KBY	001 103 5646 8
C315, C316	ECEA1EK3R3B	001 120 0292 7
C331, C332 (EG)	ECKD1H103PF	
C375	ECKD1H271KB	001 103 1515 4
C403, C404	RCBS1H101KBY	001 103 5569 4
C405, C406	ECBT1H821KB5	001 103 9382 7
C407, C408	RCBS1H390JLY	001 103 5621 7
C409, C410	ECEA1HPS3R3	001 120 6064 3
C421, C422	ECFTD123KXL	001 108 0745 1
C423, C424	ECFTD683KXL	001 108 0346 2
C425, C426	ECFTD472KXL	001 108 0746 0
C427, C428	ECFTD223KXL	001 108 0342 6
C433, C434	ECBT1E103ZF5	001 103 8080 2
C435	ECEA1CKS100	001 120 2600 7
C441, C442	ECFTD473KXL	001 108 0361 3
C443, C444	ECEA1HPS010	001 120 6063 4
C445, C446	ECEA1HPS010	001 120 6063 4
C447, C448	ECEA1HPS3R3	001 120 6064 3
C449, C450	ECBT1E103ZF5	001 103 8080 2
C451, C452	ECEA1CKS100	001 120 2600 7
C453, C454	ECBT1E103ZF5	001 103 8080 2
C455, C456	ECEA1HPS3R3	001 120 6064 3
C463	ECEA1HK0R1	001 120 0340 6
C464	ECBT1E223ZF	001 103 7589 2
C499	RCBS1H101KBY	001 103 5569 4
C501, C502	ECEA1HPS3R3	001 120 6064 3
C503, C504	RCBS1H151KBY	
C505, C506	RCBS1H820KBY	001 103 5646 8
C507	ECEA2AU010	001 120 3578 4
C508	ECEA1HK010	001 120 0341 5
C509, C510	ECEA1CPS220	001 120 6060 7
C511, C512	RCBS1H180JLY	001 103 5592 5
C513, C514	ECBT1H681KB5	001 103 9167 2
C515, C516	RCBS1H120JLY	001 103 5578 3
C517, C518	ECBT1H102KB5	001 103 8123 8
C520, C521	ECKD1H102PF	
C522	ECKD1H102PF	
C531, C532	ECKD1H333PF	001 103 1539 6
C533, C534	RCBS1H680JLY	001 103 5640 4
C537, C538	ECEA1HK010	001 120 0341 5
C539, C540	ECEA1VK330	001 120 4800 3
C541, C542	RCBS1H680JLY	001 103 5640 4
C561, C562	RCBS1H151KBY	
C563, C564	ECKD1H223PF	001 103 1449 7
C565, C566	RCBS1H151KBY	
C567, C568	ECKD1H223PF	001 103 1449 7
C571, C572	RCBS1H330JLY	001 103 5617 3
C573, C574	RCBS1H560JLY	001 103 5636 0
C575, C576	ECQM1H392JZ	001 106 0790 6
C577, C578	ECEA1HK010	001 120 0341 5
C579, C580	RCBS1H330JLY	001 103 5617 3
C581, C582	ECEA1AU101	001 120 2830 5
C583, C584	ECEA1AU101	001 120 2830 5
C585, C586	ECBT1H821KB5	001 103 9382 7
C587, C588	ECFTD472KXL	001 108 0746 0
C589, C590	ECKD1H333PF	001 103 1539 6
C591, C592	ECKD1H333PF	001 103 1539 6
C593, C594	ECKD1H473ZF	001 103 5404 4
C597, C598	ECKD1H473ZF	001 103 5404 4
C601	ECEA0JS102	001 120 0152 8
C602	ECBT1E223ZF	001 103 7589 2
C605, C606	ECEA1HK010	001 120 0341 5
C612, C613	RCBS1H221KBY	001 103 5603 9
C614, C615	ECEA1VK330	001 120 4800 3
C620, C621	ECBT1E103ZF5	001 103 8080 2
C623, C624	ECBT1E103ZF5	001 103 8080 2
C625, C627	ECBT1E103ZF5	001 103 8080 2
C628, C629	ECBT1E103ZF5	001 103 8080 2
C630, C631	ECBT1E103ZF5	001 103 8080 2
C632	ECBT1E103ZF5	001 103 8080 2
C634	ECEA0JK470	001 120 0143 9
C635	ECEA1HK2R2B	001 120 0346 0
C637, C638	ECBT1E103ZF5	001 103 8080 2
C639, C649	ECBT1E103ZF5	001 103 8080 2
C651, C652	ECEA1HK010	001 120 0341 5
C653	ECEA1CKS100	001 120 2600 7
C654	RCBS1H331KBY	001 103 5619 1
C661, C662	RCBS1H330JLY	001 103 5617 3
C698, C699	RCBS1H101KBY	001 103 5569 4
C700 ⚠	ECKDKC103PF2	001 103 3734 7
C701, C702	ECETS56V682V	001 120 2779 1
C703, C704	ECKD1H103PF	001 103 1449 7
C705, C706	ECEA1CK470	001 120 0227 6
C707, C708	ECEA1CK220	001 120 0225 8
C709	ECEA1VK330	001 120 4800 3
C710	ECEA1HK4R7	001 120 2640 9
C711	ECKD2H103PF	001 103 1626 8
C711 (EG)	ECKD2H101PF	
C712	ECEA1AU101	001 120 2830 5
C713	ECEA1CKS100	001 120 2600 7
C714	ECKD1H103PF	001 103 1449 7
C721	ECEA1CK470	001 120 0227 6
C722	ECEA1CKS100	001 120 2600 7
C723	ECEA1CU101	001 120 2926 8
C731	ECEA0JS331	001 120 2975 9
C732	ECFTD223KXL	001 108 0342 6
C733	ECEA0JK330	001 120 0141 1
C734	ECEA1CKS100	001 120 2600 7

■ BLOCK DIAGRAM



IC205
DAT Monitor select

S201 (DAT MONITOR)
D205
D641
DAT MONITOR IND

IC301
Inverter

IC302
Mixing amp.

IC304
AV Surround (

IC303
Buffer amp.

Q303
Switchin Drive

Q301
Q302

IC302
Phase shift signal mixing

IC302
Phase shift signal mixing

IC401
Tone amp.

0dB
-10dB
-70dB
Latch circuit
Level shift
Shift regist
treble
bass
0dB
-2dB
∞

IC402
Super bass amp.

Q404
Super bass ON/OFF

IC403
Attenutor/volme control

Q401
Mixing

Q609
Muting control

VR403
BALANCE

NF

Class AA Control Amp.

IC501
Current Mirror
Cascode
Current stabilizer
Bias
Muting

Q501
Pre amp.

Q505
Limter

Q509,513
A class amp.

Q503
ICQ 調整

Q511,515
A class amp.

Q507
Limter

Q611
SUPER BASS IND
Q612
MUTING IND
Q613

D627
D623
D625
D629
D624
D626
D630
D628

IC606
Muting control /LED drive amp.

Q605
Switching

Control signal (From Tape 1/ Telephones)
REC control
Remote control
Selector
Deck control output

Control signal (From Tuner)
Selector
Q630
Switching
Q602,603
Signal rect.

CD Syncro REC
Syncro REC input

Player Syncro REC
Syncro REC input
Start
Stop
Q604
Switching
D617
D618

D611
D612
D613
D605
D606
D607
D608
D609
D610

VR601
Volume encorder

IC602
IC603
Interface

D661

Q606
Switching (Power)
Q607
Switching (Power)

IC601 MICROCOMPUTER
DECK
OSC IN
OSC OUT
X1

FL
To Power transformer

S601 SURRO-UND
S603 SUPER BASS
S602 MUTING
S604 VTR
S605 TAPE
S606 VD
S611 CD
S607 TUNER
S608 PHONO
Input selector

D643 (VTR)
D644 (TAPE)
D645 (VD)
D642 (CD)
D646 (TUNER)
D647 (PHONO)
Input selector LED

Q610
Switching
D622
SURROUND IND
Q622
Q621
D650
Q621,622
Switching

Q521
Overload DET

IC502
Class AA Bridge Network
Pre drive
Driver
Output amp.
ICQ adj.
Current stabilizer
Current stabilizer
Driver
Output amp.

Q517,518,519,520
Current stabilizer

IC701
Muting/ Ptotection
Overload DET
Bias
Muting
DC DET
DC DET

Relay
Q706
Relay drive

HEADPHONES
S501 (SPEAKER)
SPEAKER

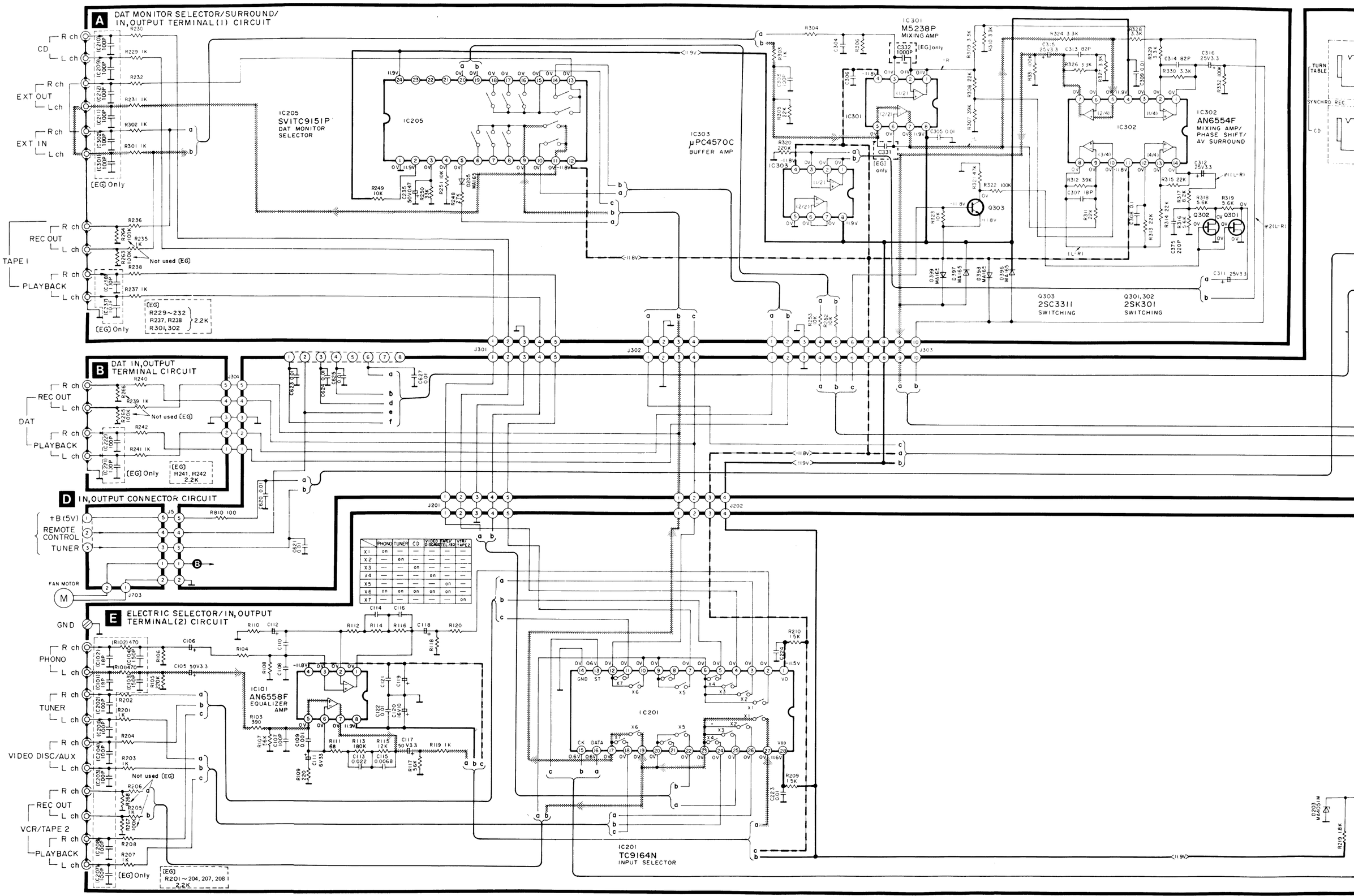
Q710
Q709

Q702,D708
Regulator
Q701,D705
Regulator
Q703,D704
Regulator
D714
D707
D701~704

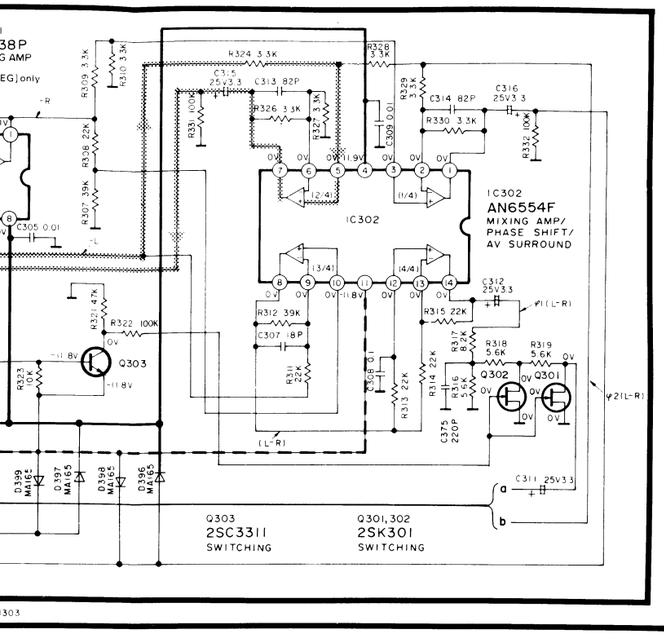
To Digital multie display

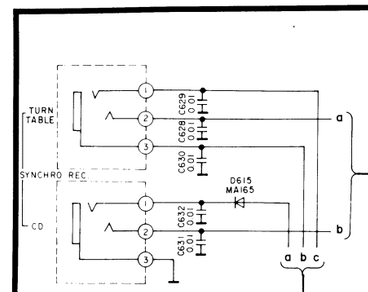
Power transformer
S701 (Power)
AC 100V (50/60Hz)
AC OUTLET

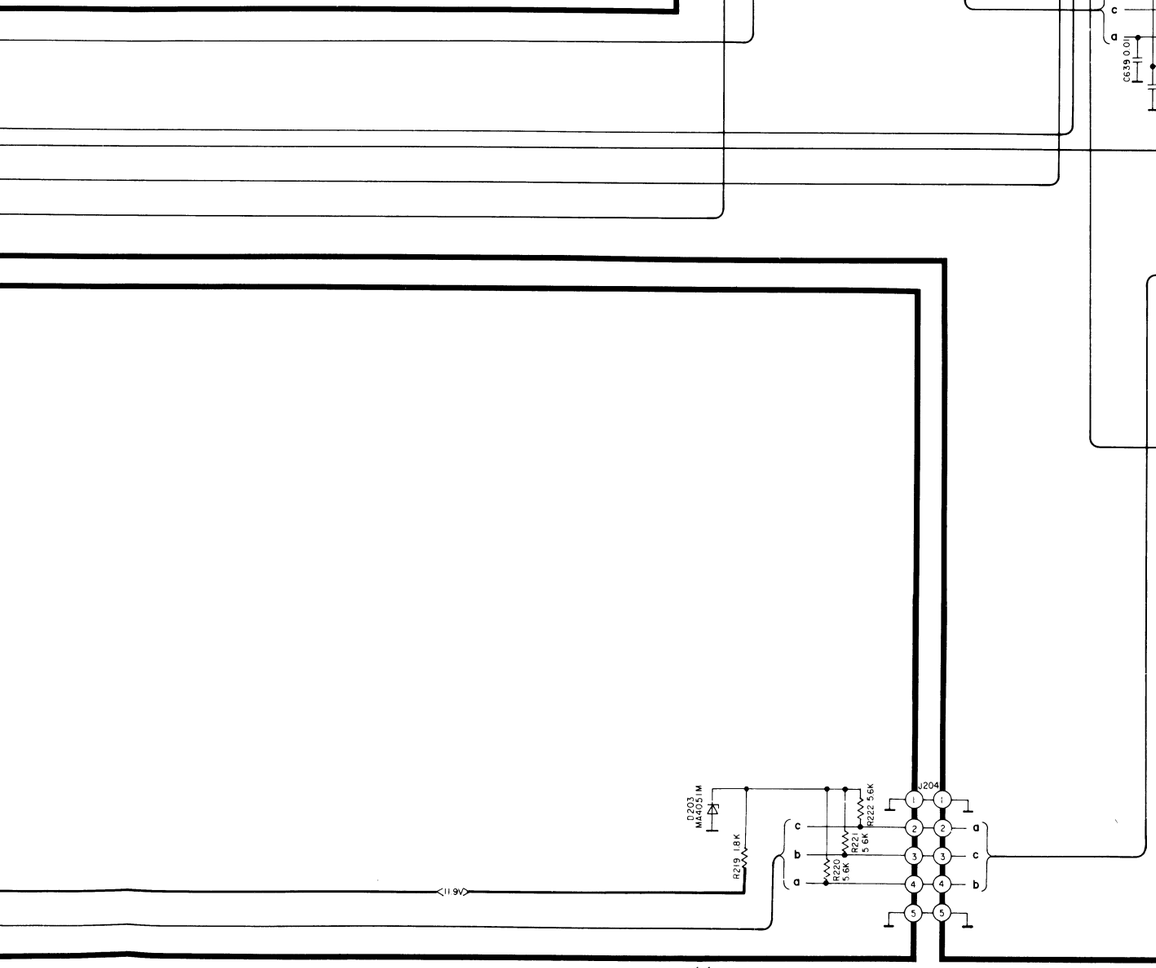
PHONO SIGNAL
ORIGINAL SIGNAL
PHASE SHIFT SIGNAL
SURROUND SIGNAL

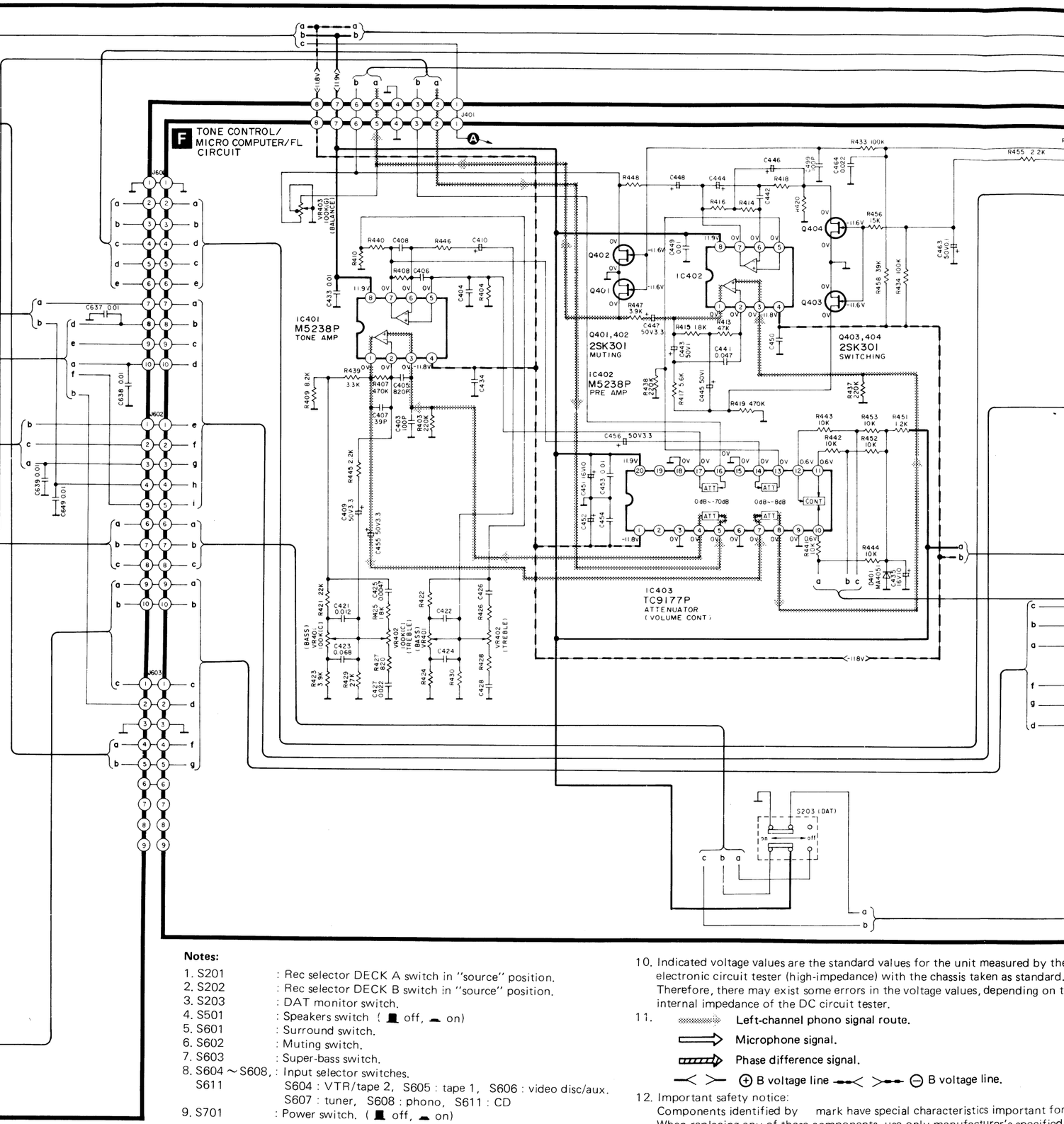

A DAT MONITOR SELECTOR/SURROUND/ IN,OUTPUT TERMINAL(1) CIRCUIT
CD
EXT OUT
EXT IN
TAPE 1
REC OUT
PLAYBACK
[EG] Only
Not used [EG]
[EG] R229~232 R237, R238 R301,302 2.2K
IC205 SVITC9151P DAT MONITOR SELECTOR
IC303 µPC4570C BUFFER AMP
IC301 M5238P MIXING AMP
IC302 AN6554F MIXING AMP/ PHASE SHIFT/ AV SURROUND
Q303 2SC3311 SWITCHING
Q301,302 2SK301 SWITCHING
B DAT IN,OUTPUT TERMINAL CIRCUIT
DAT
D IN,OUTPUT CONNECTOR CIRCUIT
+B(5V)
REMOTE CONTROL
TUNER
FAN MOTOR
E ELECTRIC SELECTOR/IN,OUTPUT TERMINAL(2) CIRCUIT
GND
PHONO
VIDEO DISC/AUX
VCR/TAPE 2
IC101 AN6558F EQUALIZER AMP
IC201 TC9164N INPUT SELECTOR
TURN TABLE
SYNCHRO REC
CD

— 12 — — 13 — — 14 —



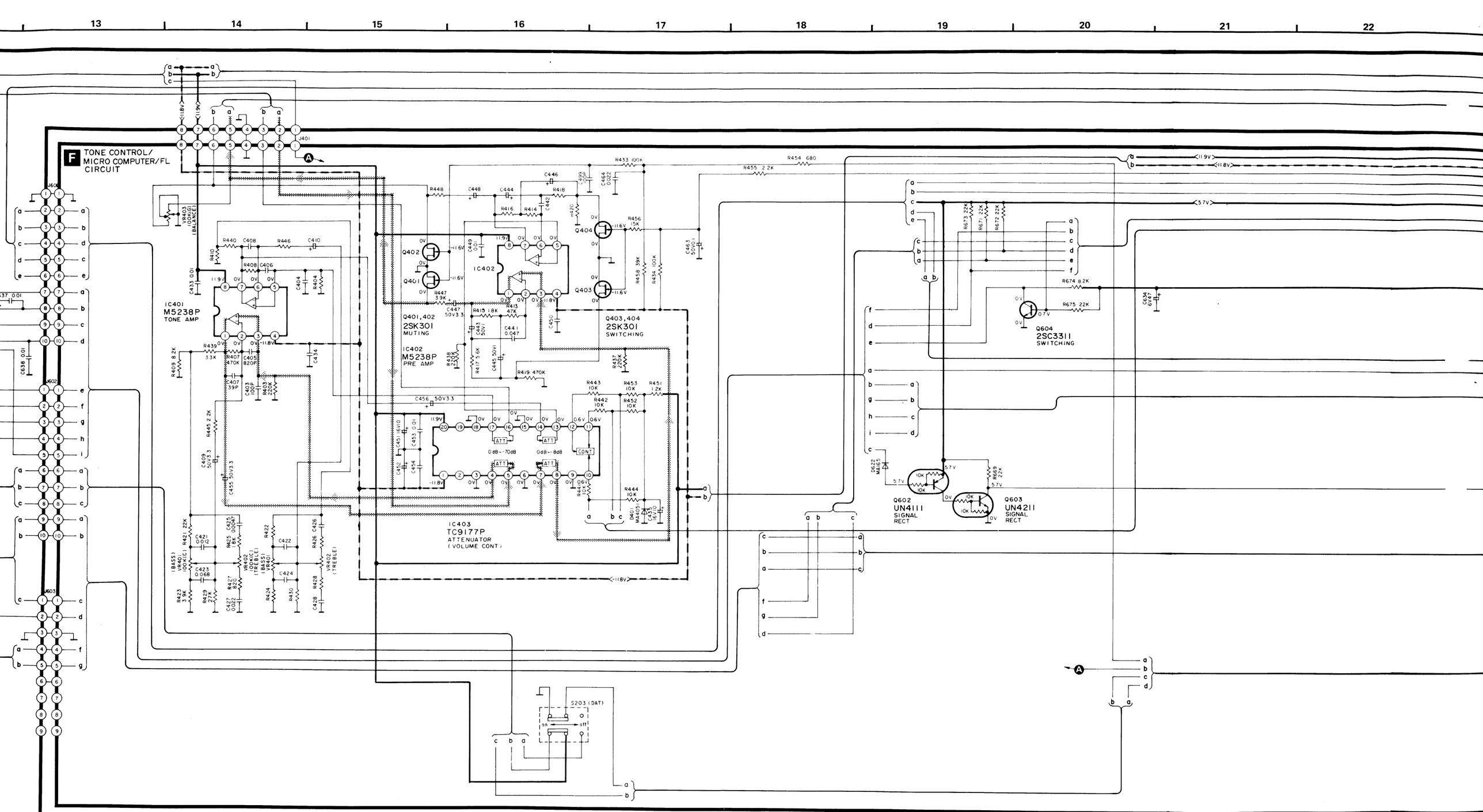






Notes:

1. S201 : Rec selector DECK A switch in "source" position.
2. S202 : Rec selector DECK B switch in "source" position.
3. S203 : DAT monitor switch.
4. S501 : Speakers switch (▙ off, ▁ on)
5. S601 : Surround switch.
6. S602 : Muting switch.
7. S603 : Super-bass switch.
8. S604 ~ S608, S611 : Input selector switches.
   S604 : VTR/tape 2, S605 : tape 1, S606 : video disc/aux.
   S607 : tuner, S608 : phono, S611 : CD
9. S701 : Power switch. (▙ off, ▁ on)
10. Indicated voltage values are the standard values for the unit measured by the electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on t internal impedance of the DC circuit tester.
11. Left-channel phono signal route.
    Microphone signal.
    Phase difference signal.
    ⊕ B voltage line ⊖ B voltage line.
12. Important safety notice:
    Components identified by mark have special characteristics important for
    When replacing any of these components, use only manufacturer's specified



Notes:

1. S201 : Rec selector DECK A switch in "source" position.
2. S202 : Rec selector DECK B switch in "source" position.
3. S203 : DAT monitor switch.
4. S501 : Speakers switch (▙ off, ▁ on)
5. S601 : Surround switch.
6. S602 : Muting switch.
7. S603 : Super-bass switch.
8. S604 ~ S608, S611 : Input selector switches.
   S604 : VTR/tape 2, S605 : tape 1, S606 : video disc/aux.
   S607 : tuner, S608 : phono, S611 : CD
9. S701 : Power switch. (▙ off, ▁ on)

10. Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
11. Left-channel phono signal route.
    Microphone signal.
    Phase difference signal.
    ⊕ B voltage line ⊖ B voltage line.
12. Important safety notice:
    Components identified by mark have special characteristics important for safety.
    When replacing any of these components, use only manufacturer's specified parts.

*** Caution!**

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

* Cover the parts boxes made of plastics with aluminum foil.
* Ground the soldering iron.
* Put a conductive mat on the work table.
* Do not touch the legs of IC or LSI with the fingers directly.

C MAIN CIRCUIT

DIGITAL MULTI DISPLAY

FL601 SAD2MT03ZK

IC601 LC6554D-3230 MICRO COMPUTER

IC602 MN4030B LOGIC(OR)

IC603 MN4013B LOGIC (FLIP-FLOP)

INPUT / KO	29	28	27	26	25	24
PHONO	L	H	H	H	H	H
TUNER	H	L	H	H	H	H
CD	H	H	L	H	H	H
VIDEO DISC/AUX	H	H	H	L	H	H
TAPE/TEL/EE	H	H	H	H	L	H
VTR/TAPE2	H	H	H	H	H	L

H 4.9V, L 0.5V

IC606 μPC4570C MUTING/LED DRIVE

Q605 UN4211 SWITCHING

Q606 UN4211 SWITCHING

Q607 UN4211 SWITCHING

Q609 2SAI309 SWITCHING

Q610 UN4111 SWITCHING

Q611 UN4111 SWITCHING

Q612 UN421F SWITCHING

Q613 UN421F SWITCHING

G INPUT SELECTOR SWITCH/LED CIRCUIT

Q622 2SAI309 SWITCHING

Q621 2SC3311 SWITCHING

S608 (PHONO) S607 (TUNER) S611 (CD) S606 (VIDEO DISC/AUX)

S605 (TAPE1) S604 (VTR/TAPE2) S602 (MUTING)

S603 (SUPER BASS) S601 (SURROUND)

D641 (DAT MONITOR) LN0143I5P

D642 (CD) LN0183I5P

D643 (VTR/TAPE 2)

D644 (TAPE1)

D645 (VIDEO DISC/AUX) D643 ~ D647 LN864RP-C

D646 (TUNER)

D647 (PHONO)

D687 220 S601 (SURROUND)

D688 220 S603 (SUPER BASS)

D689 220 S602 (MUTING)

H VOLUME CIRCUIT

Volume encorder

VR601

IC501 AN7062N VOLTAGE AMP

Q501,502 2SAI123 PRE DRIVE

Q501

Q502

Q611
UN4111
SWITCHING

Q612
UN421F
SWITCHING

IC606
μPC4570C
MUTING/LED
DRIVE

Q613
UN421F
SWITCHING

G INPUT SELECTOR SWITCH/LED CIRCUIT

Q622
2SA1309
SWITCHING

Q621
2SC3311
SWITCHING

D641 (DAT MONITOR)
LN0143-5P

D642 (CD)
LN0183-5P

D643 (VTR/TAPE 2)
D644 (TAPE 1)
D645 (VIDEO DISC/AUX)
D643 ~ D647
LN864RP-C
D646 (TUNER)
D647 (PHONO)

S601 (SURROUND)
S603 (SUPER BASS)
S602 (MUTING)

S608 (PHONO) S607 (TUNER) S611 (CD) S606 (VIDEO DISC/AUX)
S605 (TAPE 1) S604 (VTR/TAPE 2) S602 (MUTING)
S603 (SUPER BASS) S601 (SURROUND)

C MAIN CIRCUIT

Q517, 518
2SC2631
CURRENT STABILIZER

Q519, 520
2SA1123
CURRENT STABILIZER

Q521, 522
2SA992
OVER LOAD DET.

IC502
SVI4004
POWER/
CURRENT AMP

BRIGE NETWORK

Q501, 502
2SA1123
PRE DRIVE

IC501
AN7062N
VOLTAGE
AMP

Q503, 504
2SC1685
LIMTER

Q505, 506
2SC3311A
LIMTER

Q507, 508
2SA1309A
LIMTER

Q509, 510
2SC2631
A CLASS AMP

Q511, 512
2SA1123
A CLASS AMP

Q513, 514
2SC3298
A CLASS AMP

Q515, 516
2SA1306
A CLASS AMP

IC701
AN7073
PROTECTION
(MUTING)

MUTING
BIAS
OUTPUT SHINK
OVER LOAD DETECTOR
DC DET
AC DET

Q706
2SA992
RELAY ON

I HEADPHONES SPEAKER SWITCH CIRCUIT

S501 (SPEAKER)
HEADPHONES

Q704
2SC3311A
MOTOR DRIVE

Q705
2SA1309A
MOTOR DRIVE

Q702
2SD1265
REGULATOR

Q701
2SD1265
REGULATOR

Q703
2SB941
REGULATOR

35 36 37 38 39 40 41

Q519,520
2SA1123
CURRENT STABILIZER

Q521,522
2SA992
OVER LOAD DET.

I HEADPHONES SPEAKER SWITCH CIRCUIT

S501 (SPEAKER)

HEADPHONES

J SPEAKER TERMINAL CIRCUIT

(EG) only

L ch
MAIN SPEAKERS (8~16Ω)
R ch

L ch
SURROUND SPEAKERS
R ch

L ch
REMOTE SPEAKERS
R ch

(EG) only

IC502
SV14004
POWER/CURRENT AMP

IC701
AN7073
PROTECTION (MUTING)

Q704
2SC3311A
MOTOR DRIVE

Q705
2SA1309A
MOTOR DRIVE

Q702
2SD1265
REGULATOR

Q701
2SD1265
REGULATOR

Q703
2SB941
REGULATOR

Q706
2SA992
RELAY ON

K POWER SUPPLY CIRCUIT

AC 220V (50/60Hz)

SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

For (XA,PA,PE)

AC 110/127/220/240V (50/60 Hz)

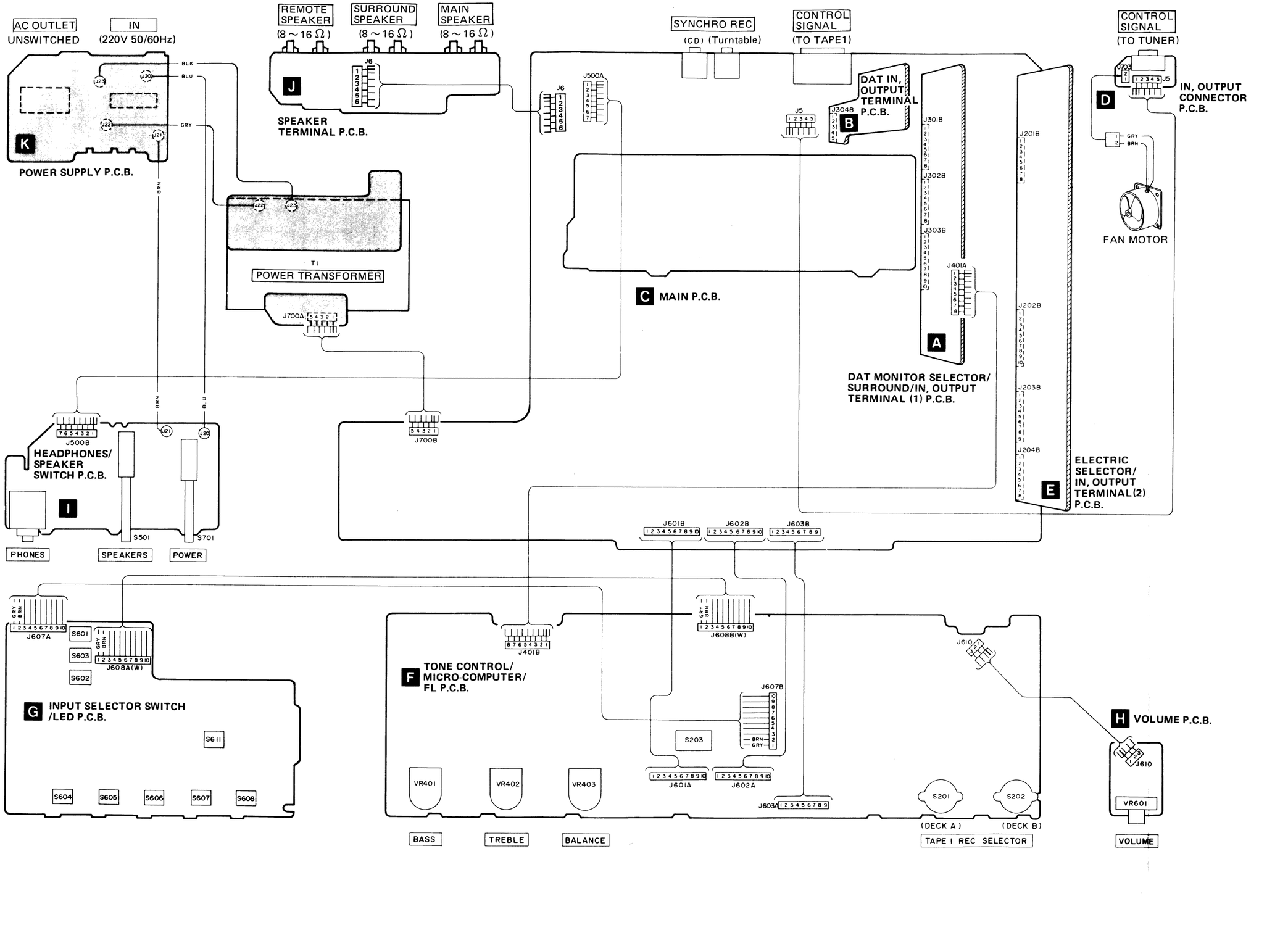
For [EW] and [EG]

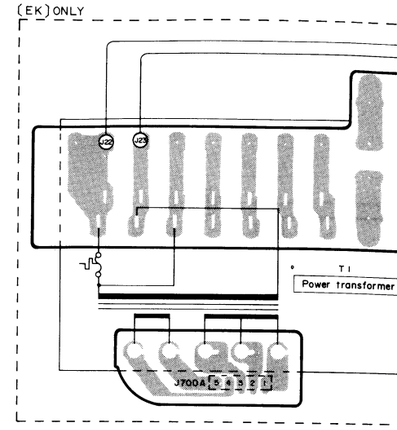
AC 220V (50/60Hz)

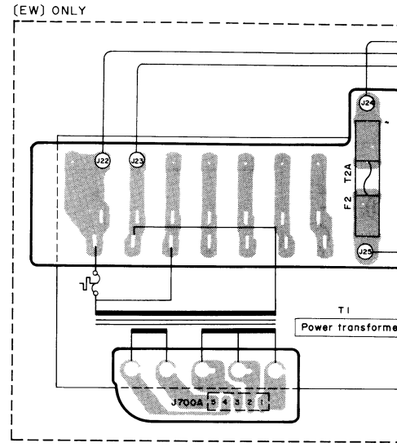
For [EK]

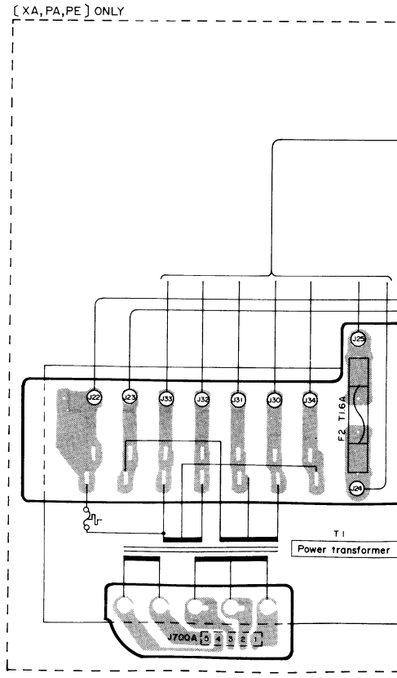
AC 240V (50/60Hz)

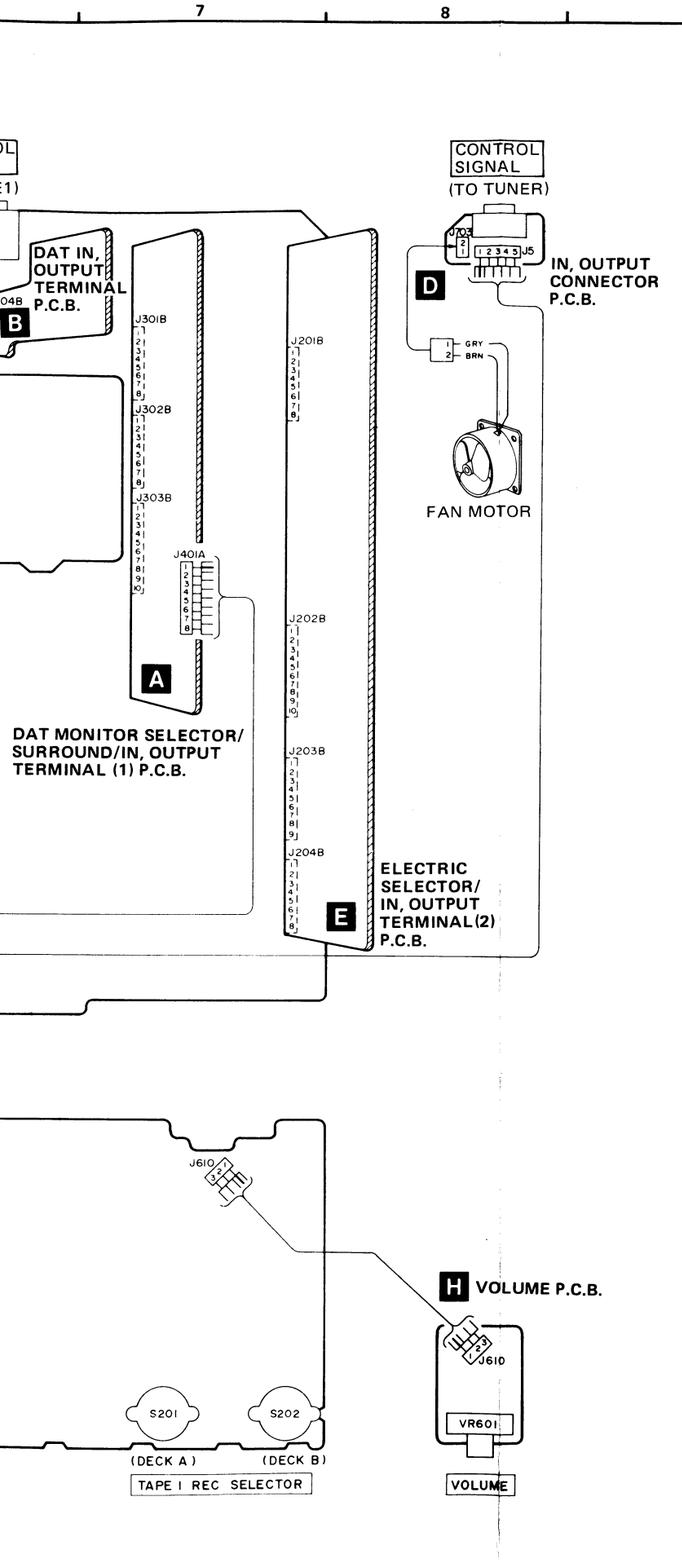
■ WIRING CONNECTION DIAGRAM



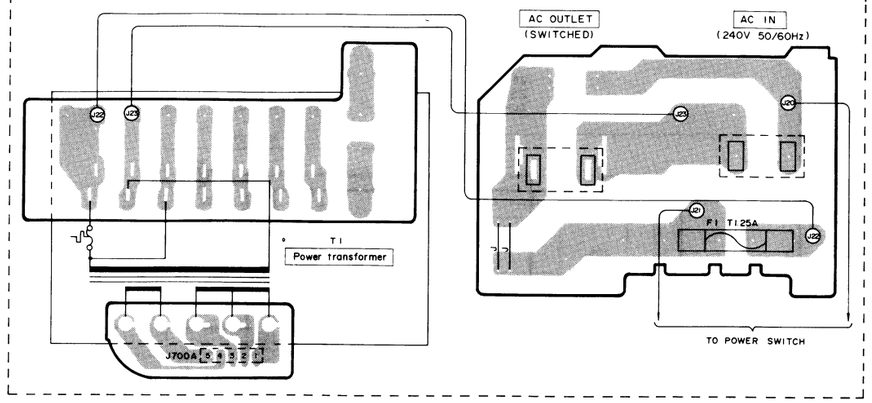




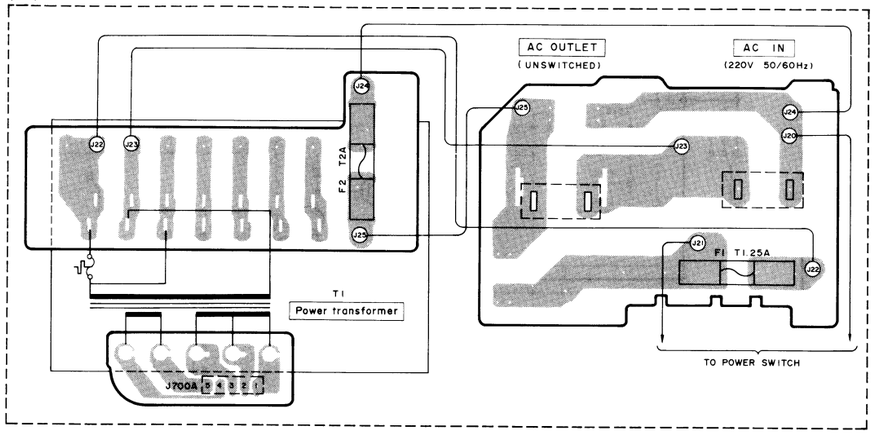




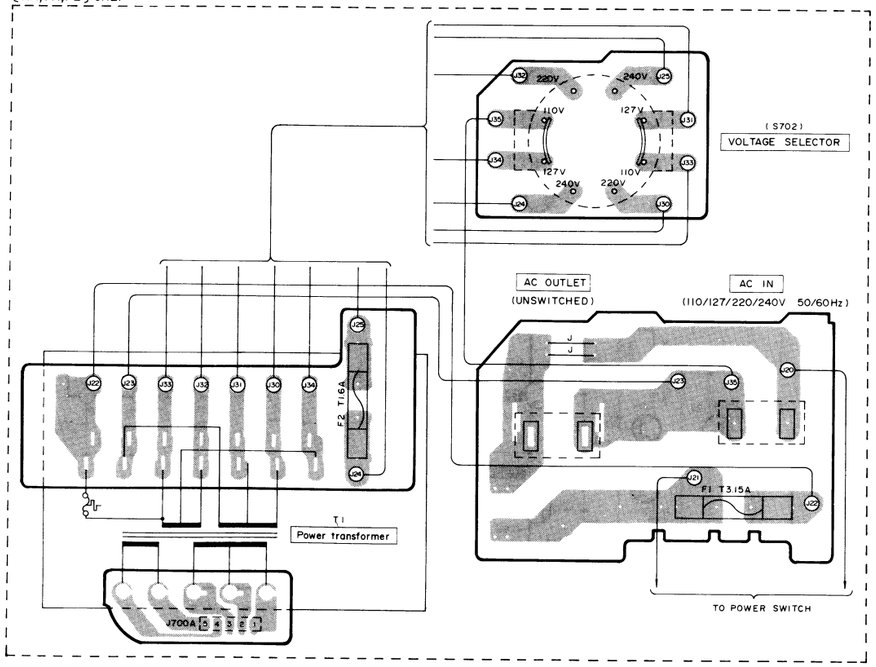
(EK) ONLY



(EW) ONLY

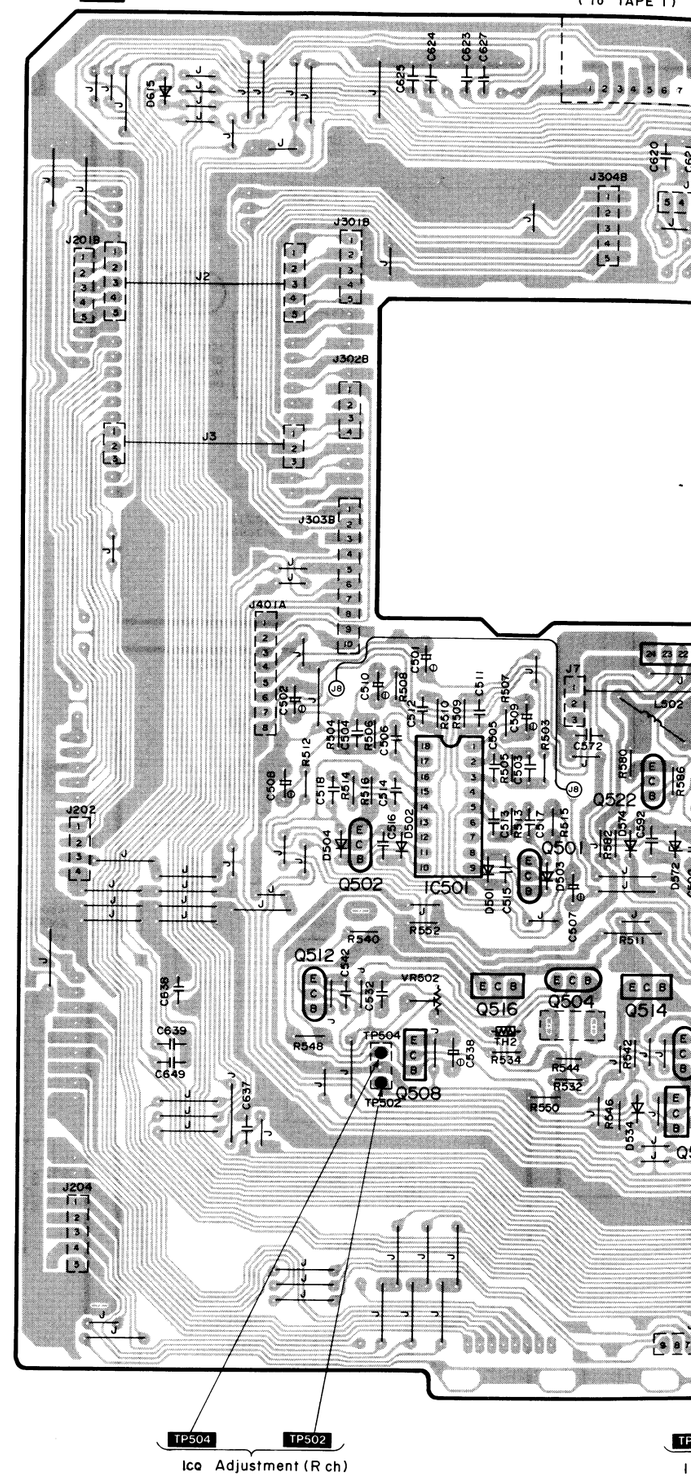


(XA,PA,PE) ONLY



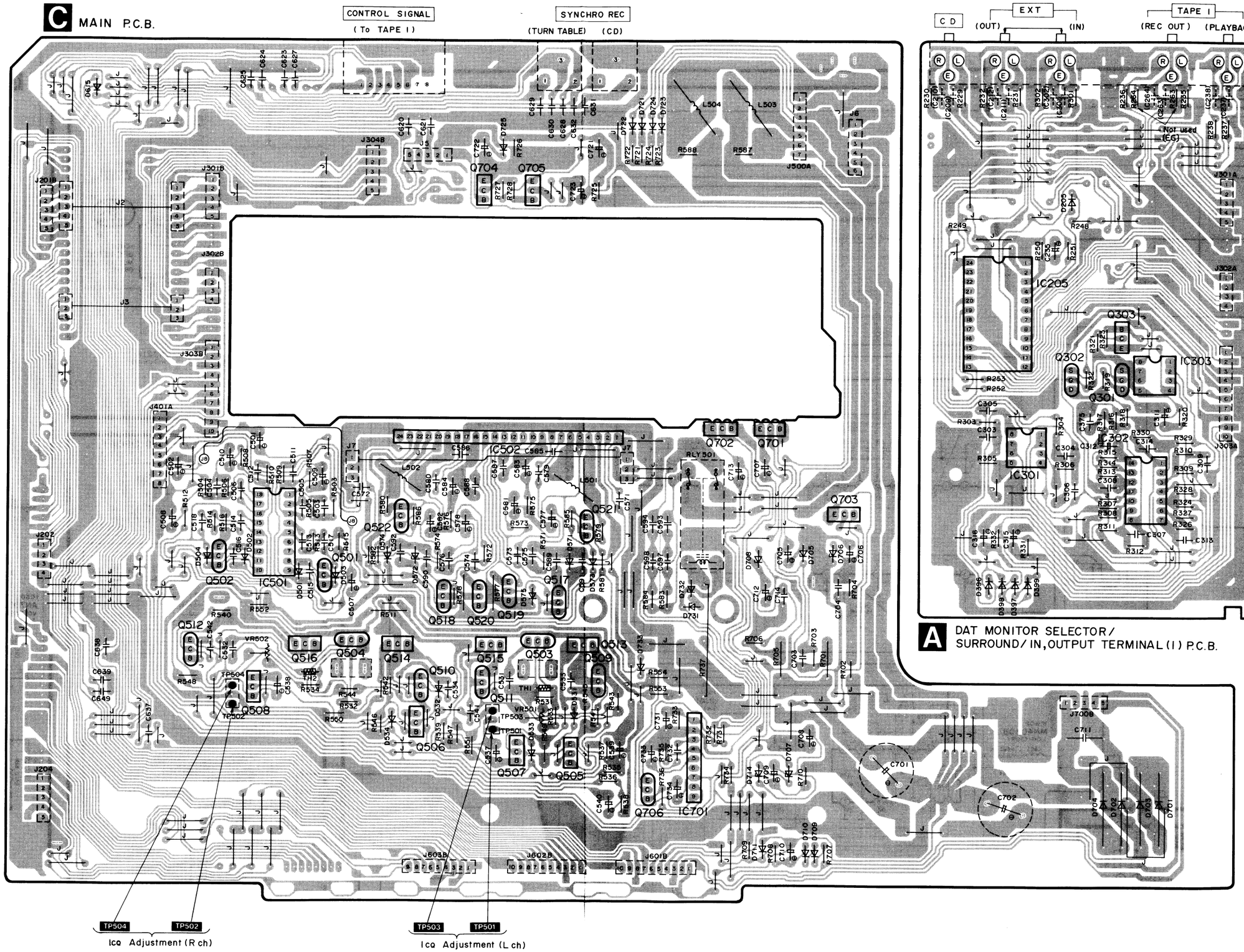
■ PRINTED CIRCUIT BOARDS

C MAIN P.C.B.



■ PRINTED CIRCUIT BOARDS

C MAIN P.C.B.



A DAT MONITOR SELECTOR/ SURROUND/ IN, OUTPUT TERMINAL (I) P.C.B.

T1
(Power transformer)

J700A

K POWER SUPPLY P.C.B.

AC OUTLET

AC INLET
(AC 220V 50/60Hz)

F1 T1.25A

J SPEAKER TERMINAL P.C.B.

(REMOTE) (SURROUND) (MAIN)

SPEAKERS

H VOLUME P.C.B.

VOLUME

B DAT IN/OUTPUT TERMINAL P.C.B.

CD

(PLAYBACK) DAT (REC OUT)

Not used (EG)

D IN/OUTPUT CONNECTOR P.C.B.

CONTROL SIGNAL
(To Tuner)

G INPUT SELECTOR SWITCH/LED P.C.B.

SURROUND
SUPER BASS
MUTING

PHONO TUNER VIDEO DISC /AUX TAPE 1 VTR/ TAPE 2

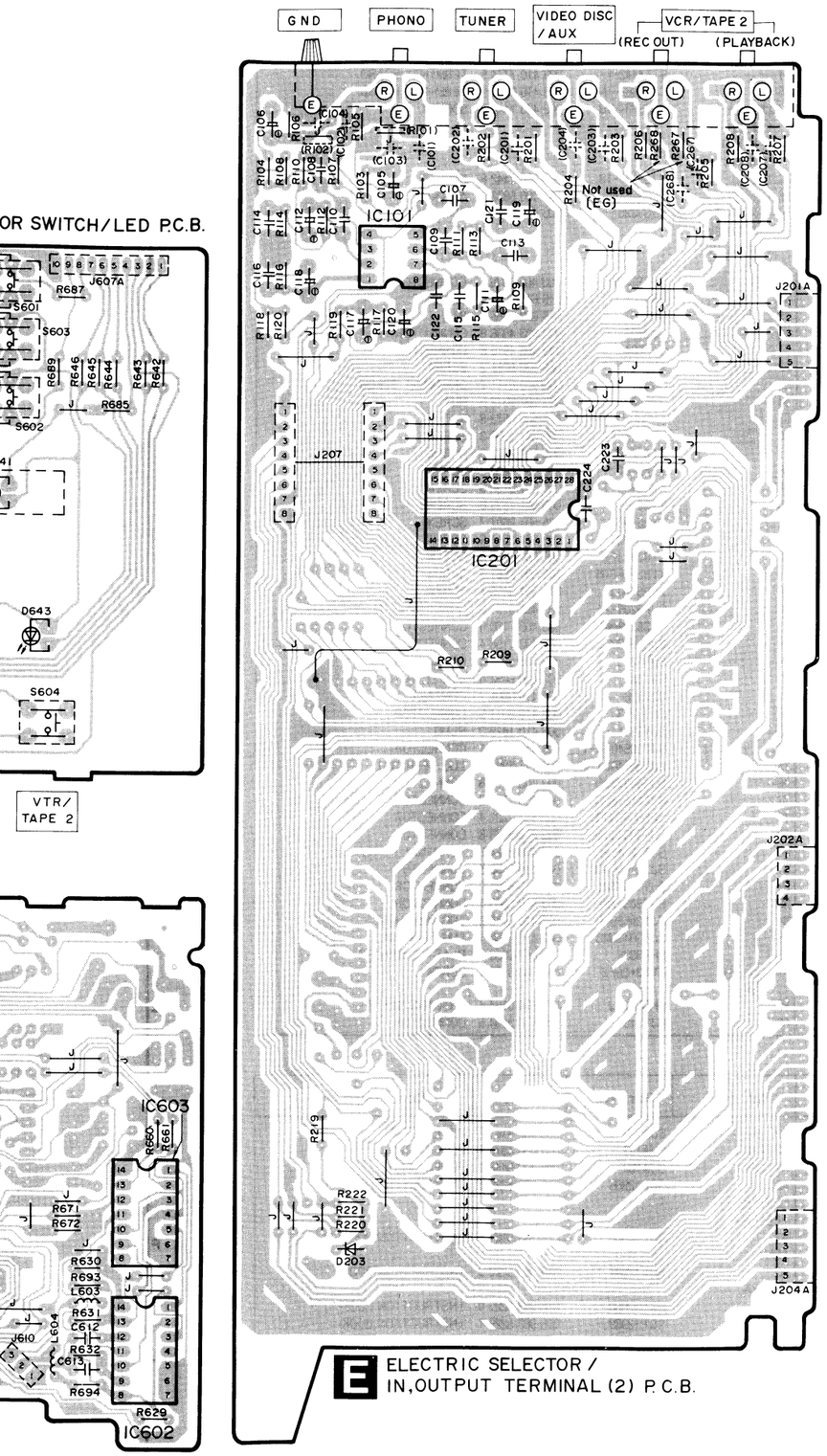
I HEADPHONES/ SPEAKER SWITCH P.C.B.

POWER
SPEAKERS
PHONES

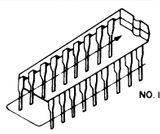
F TONE CONTROL/ MICRO-COMPUTER/FL P.C.B.

BASS TREBLE BALANCE DAT MONITOR

GND

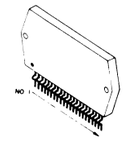


• Terminal guide of transistors, diodes and IC's

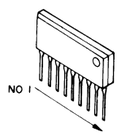


LC6554D-3230	64Pin
TC9164N	28Pin
TC9151P	24Pin
TC9152P	
TC9177P	20Pin
AN7062	18Pin
DN74LS01	14Pin
MN4013B	
MN4030B	
AN6554F	
M5238P	8 Pin
AN6558F	
UPC4570C	

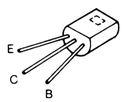
SVI4004



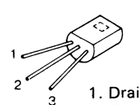
AN7073



2SC2631, 2SC1685R, 2SA992, 2SA1123

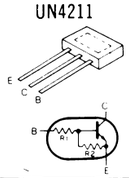


2SK301

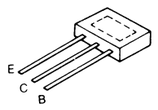


1. Drain
2. Gate
3. Source

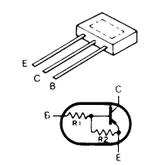
UN4211



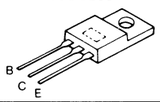
2SA1309, 2SC3311



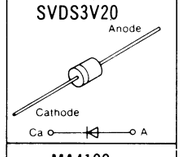
UN4111



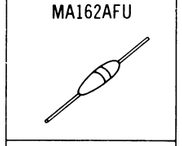
2SA1306, 2SC3298, 2SB941, 2SD1265



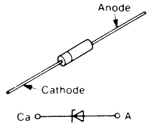
MA165, MA167, MA29W, SVDS3V20



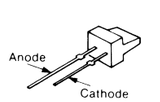
MA4100, MA4120, MA162AFU



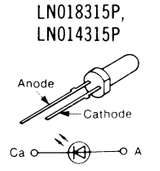
MA4051, MA4056, MA4062, MA4150



LN846RP



LN018315P, LN014315P



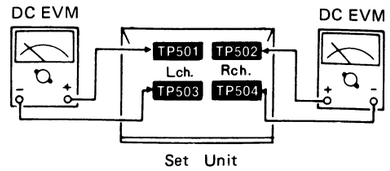
■ MEASUREMENTS AND ADJUSTMENTS

Control positions and equipment used.

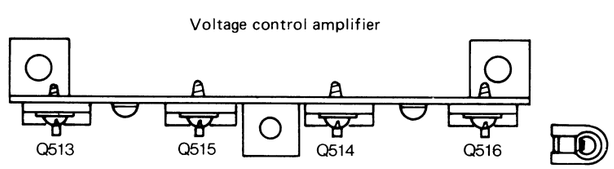
- Volume control . . . . . Minimum
- Speaker switch . . . . . off
- DC electronic voltmeter (EVM) (2 units)

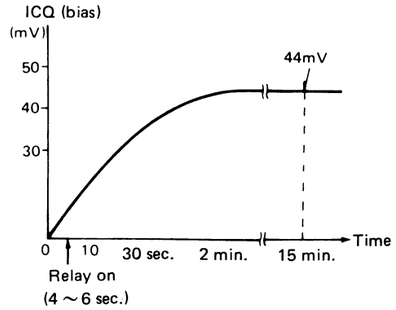
Idling (ICQ) adjustment

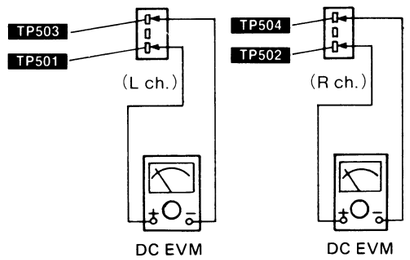
1. Connect the set and the test instruments as shown at right.
2. (Hook up the DC EVMs for both channels.)
2. Turn the ICQ adjusting controls (VR501, VR502) all the way counterclockwise.
3. Turn on the set when it is cold enough, and adjust the controls VR501 and VR502 so that the voltage of 30mV be reached 15 seconds after the relay is activated.
   (Adjust for both channels at a time.)
   Make sure the voltage is 18 ~ 47 mV (standard 44mV) in 10 ~ 15 minutes.
   (It should be below 50mV 60 minutes later.)



• Adjustment points







■ REPLACEMENT PARTS LIST

Notes:

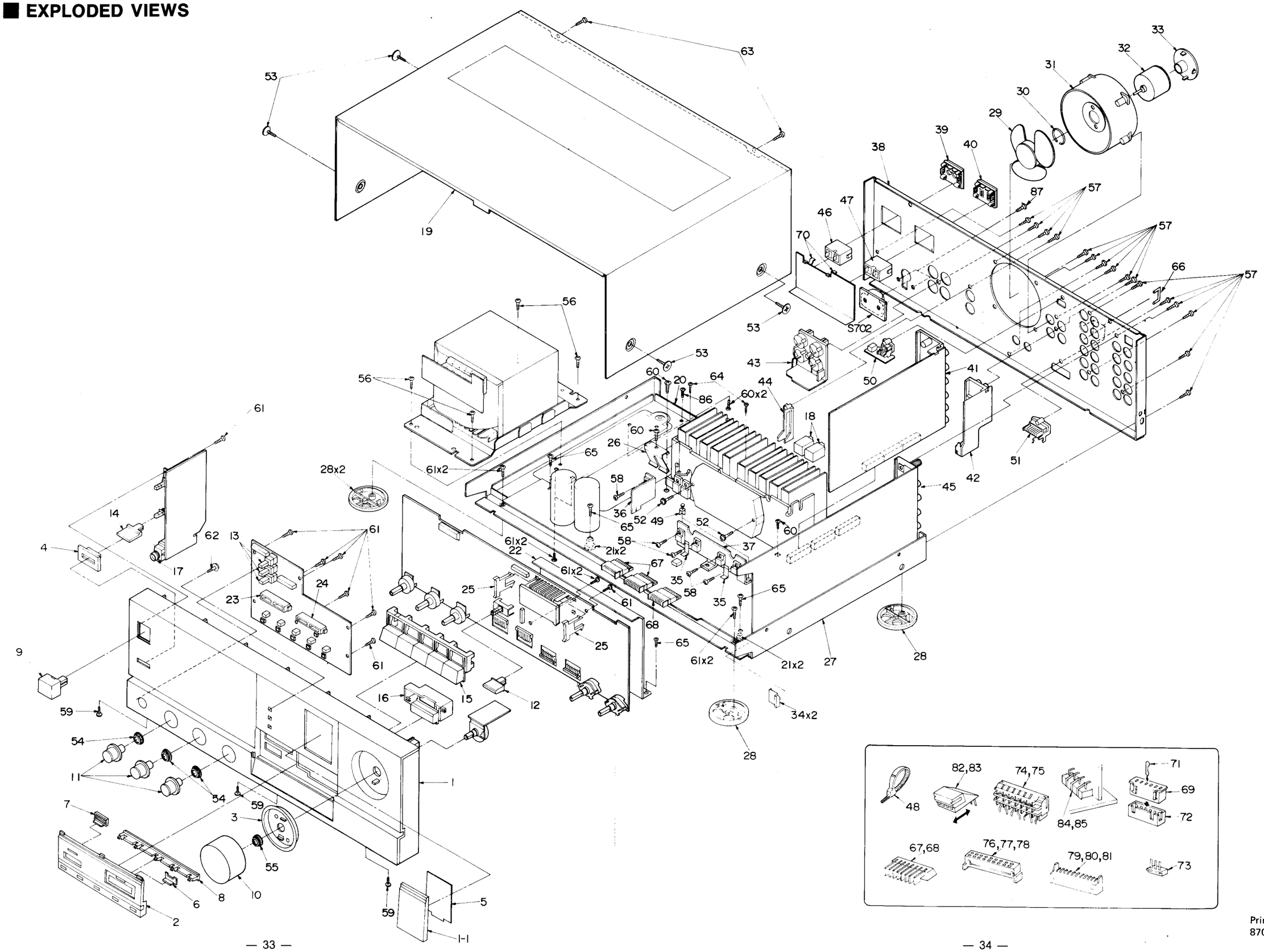
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts order.
2. Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
4. The parenthesized numbers in the column of description stand for the quantity per set.

Ref. No.	Part No.	Part Code	Description
INTEGRATED CIRCUITS			
IC101	AN6558F	001 060 4009 1	I.C., EQUALIZER
IC201	TC9164N	001 061 0204 1	I.C., INPUT SELECTOR
IC205	SVITC9151P	001 060 8344 3	I.C., DAT MONITOR SELECTOR
IC301	M5238P	001 060 8887 7	I.C., TONE AMP
IC302	AN6554F	001 060 2992 1	I.C., MIXING
IC303	SVIUPC4570C	001 060 8992 7	I.C., AMP
IC401, IC402	M5238P	001 060 8887 7	I.C., TONE/PRE
IC403	TC9177P	001 061 0839 2	I.C., VOLUME CONTROL
IC501	AN7062N	001 060 8240 0	I.C., AMP, AMP
IC502	SVI4004	001 061 1230 5	I.C., POWER AMP
IC601	LC6554D-3230	001 061 4016 7	I.C., MICRO COMPUTER
IC602	MN4030B	001 060 6553 4	I.C., LOGIC
IC603	MN4013B	001 060 3656 0	I.C., LOGIC
IC606	SVIUPC4570C	001 060 8992 7	I.C., MUTING
IC701	AN7073	001 060 8241 9	I.C., PROTECTION
TRANSISTORS			
Q301, Q302	2SK301	001 030 2428 2	TRANSISTOR
Q303	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q401, Q402	2SK301	001 030 2428 2	TRANSISTOR
Q403, Q404	2SK301	001 030 2428 2	TRANSISTOR
Q501, Q502	2SA1123-R	001 030 0242 8	TRANSISTOR
Q503, Q504	2SC1685-QNC	001 030 2729 2	TRANSISTOR
Q505, Q506	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q507, Q508	2SA1309Q	001 030 4058 0	TRANSISTOR
Q509, Q510	2SC2631-Q	001 030 2505 6	TRANSISTOR
Q511, Q512	2SA1123-R	001 030 0242 8	TRANSISTOR
Q513, Q514	2SC3298AY	001 030 4986 9	TRANSISTOR
Q515, Q516	2SA1306AY	001 030 4845 1	TRANSISTOR
Q517, Q518	2SC2631-Q	001 030 2505 6	TRANSISTOR
Q519, Q520	2SA1123-R	001 030 0242 8	TRANSISTOR
Q521, Q522	2SA992E	001 030 0513 4	TRANSISTOR
Q602	UN4111	001 030 2899 5	TRANSISTOR
Q603	UN4211	001 030 4033 9	TRANSISTOR
Q604	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q605, Q606	UN4211	001 030 4033 9	TRANSISTOR
Q607	UN4211	001 030 4033 9	TRANSISTOR
Q609	2SA1309Q	001 030 4058 0	TRANSISTOR
Q610, Q611	UN4111	001 030 2899 5	TRANSISTOR
Q612, Q613	UN421FTA	001 061 3186 4	TRANSISTOR
Q621	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q622	2SA1309Q	001 030 4058 0	TRANSISTOR
Q701, Q702	2SD1265-0	001 030 2652 6	TRANSISTOR
Q703	2SB941-P	001 030 2696 4	TRANSISTOR
Q704	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q705	2SA1309Q	001 030 4058 0	TRANSISTOR
Q706	2SA992E	001 030 0513 4	TRANSISTOR
DIODES			
D203	MA4051-M	001 032 4947 6	DIODE
D205, D396	MA165	001 032 0494 0	DIODE
D397, D398	MA165	001 032 0494 0	DIODE
D399	MA165	001 032 0494 0	DIODE
D401	MA4051-M	001 032 4947 6	DIODE
D501, D502	MA162A	001 032 0493 1	DIODE
D503, D504	MA29WA	001 032 7250 0	DIODE
D531, D532	MA165	001 032 0494 0	DIODE
D533, D534	MA165	001 032 0494 0	DIODE
D571, D572	MA4062-M	001 032 7211 7	DIODE
D573, D574	MA165	001 032 0494 0	DIODE
D575	MA29WA	001 032 7250 0	DIODE
D602, D604	MA165	001 032 0494 0	DIODE
D605, D606	MA165	001 032 0494 0	DIODE
D607, D608	MA165	001 032 0494 0	DIODE
D609, D610	MA165	001 032 0494 0	DIODE
D611, D612	MA165	001 032 0494 0	DIODE
D613	MA165	001 032 0494 0	DIODE
D614	MA4056-M	001 032 7209 1	DIODE
D615, D622	MA165	001 032 0494 0	DIODE
D623, D624	MA165	001 032 0494 0	DIODE
D625, D626	MA165	001 032 0494 0	DIODE
D627, D628	MA165	001 032 0494 0	DIODE
D629, D630	MA165	001 032 0494 0	DIODE
D641	LN014315P	001 032 9961 8	DIODE, GAASP
D642	LN018315P	001 032 9292 2	LED
D643, D644	LN846RP-C	001 032 8341 4	LED
D645, D646	LN846RP-C	001 032 8341 4	LED
D647	LN846RP-C	001 032 8341 4	LED
D650, D661	MA165	001 032 0494 0	DIODE
D662	MA165	001 032 0494 0	DIODE
D701, D702 ⚠	SVDS3V40	001 032 1347 6	RECTIFIER
D703, D704 ⚠	SVDS3V40	001 032 1347 6	RECTIFIER
D705, D706	MA4150-L	001 032 4620 6	DIODE
D707	MA4100M	001 032 4722 1	DIODE
D708	MA4062-M	001 032 7211 7	DIODE
D709, D710	MA167	001 032 4142 5	DIODE
D711	MA165	001 032 0494 0	DIODE
D714	MA4120	001 032 7292 0	DIODE
D721, D722	MA167	001 032 4142 5	DIODE
D723, D724	MA167	001 032 4142 5	DIODE
D725	MA165	001 032 0494 0	DIODE
D731, D732	MA4120	001 032 7292 0	DIODE
D733	MA165	001 032 0494 0	DIODE
VARIABLE RESISTORS			
VR401, VR402	EWC2XA000C15	001 174 9012 3	V.R., BASS TRE
VR403	EWHFDA014G15	001 174 9013 2	V.R., BALANCE
VR501, VR502	EVND4AA00B52	001 180 2318 0	V.R., 500Ω(B), ICQ
VR601	EVQWX2F2040B	001 174 8803 4	VR, ENCODER
THERMISTORS AND VARISTORS			
TH1, TH2	ERTD2ZHK104S	001 191 0182 5	THERMISTOR
COILS AND TRANSFORMERS			
L501, L502	SLQY07G-40	001 211 2149 9	CHOKE COIL
L503, L504	SLQY18G-10	001 211 2185 5	CHOCK COIL
L601	ELEXT101KA	001 211 3878 9	COIL
L603, L604	ELEXT330KA	001 211 3880 5	COIL
T1 (EX, EH, EI) (EF, EB, EW) (EG)	SLT5P271	001 202 9064 6	POWER TRANSFORMER
T1 (EK, XL)	SLT5P272	001 202 9026 2	POWER TRANSFORMER
T1 (XA, XB) (PA, PE)	SLT5P273	001 202 9065 5	POWER TRANSFORMER
COMPONENT COMBINATIONS			
Z601	EXFP6331MDW	001 230 2830 2	COMPONENT COMBINATION
Z602	EXFP4331MDW	001 230 2829 5	COMPONENT COMBINATION
Z603	EXBF5E562J	001 230 1576 1	COMPONENT COMBINATION
OSCILLATORS			
X601	SVFCSA300MG	001 241 1296 5	CERAMIC FILTER
DISPLAYS			
FL	SAD2MT03ZK	001 001 0501 1	DISPLAY
FUSES			
F1 (EK)	XBA2C16TB0	002 380 1377 1	FUSE
F1 (EX, EH, EI) (EF, EB, EW) (XL, XA, XB) (PA, PE, EG)	XBA2C16TR0	002 380 0408 5	FUSE
F1 (XA, XB) (PA, PE)	XBA2C31TR0	002 380 0415 6	FUSE 250V, T3.15A
F2 (EW, EG) ⚠	XBAS2A2001	002 380 0410 1	FUSE
SWITCHES			
S203	SSH1198	003 435 5171 7	SW
S501	SSH1073	003 435 3186 8	SW
S601, S602	EVQQLY07K	003 439 2173 7	SPECIAL SW
S603	EVQQLY07K	003 439 2173 7	SPECIAL SW
S604, S605	EVQQAC05G	003 439 2072 1	SW
S606, S607	EVQQAC05G	003 439 2072 1	SW
S608, S611	EVQQAC05G	003 439 2072 1	SW
S701 ⚠	ESB8249V	003 435 5877 0	POWER SW
S702 (XA, XB) (PA, PE)	ESE37263	003 430 2327 2	SW
RELAYS			
RY501	SSY126	003 450 2686 0	RELAY

Ref. No.	Part No.	Part Code	Description
CABINET AND CHASSIS			
1	SGYUX880-KE	016 840 7711 1	FRONT PANEL
1-1	SGU544	016 842 1593 3	GLASS PLATE
2	SGX9035	016 846 3745 7	ORNAMENT
3	SGX9036	016 846 3744 8	ORNAMENT
4	SGX7893	016 846 3746 6	ORNAMENT
5	SDU325	016 842 1594 2	GLASS,TRANSPARENT PLATE
6	SGL244	016 846 3743 9	ORNAMENT
7	SGL244-1	016 846 3742 0	ORNAMENT
8	SGL245	016 846 3741 1	ORNAMENT
9	SBC666-1	016 702 6076 0	BUTTON
10	SBN1224	016 700 1972 7	KNOB
11	SBN1221	016 700 1974 5	KNOB
12	SBC937	016 702 6958 5	BUTTON
13	SBC936-1	016 702 7000 6	BUTTON
14	SBC928	016 702 6969 2	KNOB
15	SBC925B	016 702 7115 6	BUTTON
16	SBC927A	016 702 6956 7	KNOB
17	SJJ71E	003 400 4122 3	JACK
18	SJJ130-3	003 400 7580 9	JACK
19	SKC2070K961	016 800 3043 4	CABINET
20	SMN2040	016 632 1868 5	ANGLE
21	SHE187-1	016 918 0584 9	SPACER
22	SUW3077-1	016 650 5388 8	BRACKET
23	LN014315P	001 032 9961 8	DIODE, GAASP
24	LN018315P	001 032 9292 2	LED
25	SHR9823	016 652 0773 3	SPACER
26	SUS755	016 727 0175 5	SPRING
27 (EG)	SKUUX880-EG		BOTTOM BOARD
27 (EK)	SKUUX880-EK		BOTTOM BOARD
27 (EW)	SKUUX880-EW		BOTTOM BOARD
27 (EX, EH, EI) (EF, EB)	SKUUX880-EX		BOTTOM BOARD
27 (XA, XB) (PA, PE)	SKUUX880-XA		BOTTOM BOARD
27 (XL)	SKUUX880-XL		BOTTOM BOARD
28	SKL307	016 828 0325 7	FOOT
29	SHE143	016 918 0045 1	FAN
30	SUS271	016 726 0357 6	SPRING
31	SME95	016 632 0143 9	ANGLE
32	MMN6C2RKMS	002 310 0999 3	DC MOTOR 0.24W
33	SME97-1	016 632 1309 1	ANGLE
34	SME103-5	016 601 0461 1	MAGNETIC SHIELD PARTS
35	SUS227	016 727 0111 1	SPRING
36	SXE927	016 650 1104 0	ANGLE
37	SMY897-1	016 611 0021 5	HEAT SHIELD PARTS
38 (EK)	SGP7101-1A	016 840 7712 0	REAR PANEL
38 (XL)	SGP7101-2A	016 840 7855 6	REAR PANEL
38 (XA) (PA, PE)	SGP7101-3A	016 840 7856 5	REAR PANEL
38 (XB)	SGP7101-4A	016 840 7857 4	REAR PANEL
38 (EX, EH, EI) (EF, EB, EW)	SGP7101A	016 840 7759 5	REAR PANEL
38 (EX, EH, EI)	SGP7101B	016 840 7858 3	REAR PANEL
39 (EF, EB, EW) (EK, XA, XB) (PA, PE, EG)	SJS9231A	003 410 5984 5	SOCKET COVER
39 (XL) ⚠	SJS9234A	003 400 5921 6	AC INLET COVER
40 (EK) ⚠	SJS9332B	003 403 7377 5	CONNECTOR
41	SJF3062-14N	003 410 8175 8	TERMINAL PLATE
42	SJF3057N	003 410 3829 3	TERMINAL BOARD
43	SJF4818-1	003 410 7347 0	TERMINAL BOARD
44	SJF4442-1	003 410 7774 5	TERMINAL BOARD
45	SJF3062-1N	003 410 6905 6	TERMINAL BOARD
46 (EX, EH, EI) (EF, EB, EW) (EK, XA) (PA, PE, EG)	SJS9231-1B	003 400 7442 8	SOCKET
46 (XB)	SJS9231-1B	003 400 7442 8	SOCKET
46 (XL) ⚠	SJS9234B	003 400 5922 5	AC INLET
47 (EX, EH, EI) (EF, EB, EW) (XA, PA, PE) (EG) ⚠	SJS9225	003 400 3946 5	AC OUTLET
47 (EK)	SJS9332A	003 403 7376 6	CONNECTOR
48	SHR301	016 645 0044 0	CLAMPER
49	SHR401-1	016 652 0085 0	PIN
50	SJS306	003 403 4936 8	CONNECTOR
51	SJS804	003 403 4910 8	CONNECTOR
52	SNE2118	005 500 5011 2	SCREW
53	SNE2129-3	005 500 8111 7	ORNAMENT SCREW
54	SNE4021	005 507 0312 5	NUT
55	XNS8FZ	005 507 0573 8	NUT
56	XTB3+6FFZ	005 501 1590 3	SCREW
57	XTBS3+8JFZ1	005 501 2523 0	SCREW
58	XTW3+8T	005 501 1358 9	SCREW
59	XTB3+8JFZ	005 501 0138 3	SCREW
60	XTB3+8J	005 501 1535 0	SCREW
61	XTB3+8G	005 501 2607 7	SCREW
62	XTWS3+8T	005 501 3311 6	SCREW
63	XTB3+8JFZ	005 501 0138 3	SCREW
64	XTB3+8FFR1	005 501 2667 5	SCREW
65	XTB3+20J	005 501 3410 4	SCREW
66	SJP9205-2Y	003 492 6791 0	SHORTING PIN
67	SJS51080WL	003 403 7160 0	CONNECTOR
68	SJS50880WL	003 403 7158 4	CONNECTOR
69	SJS5215	003 400 5923 4	CONNECTOR
70	SJT388	003 410 6092 8	LUG TERMINAL
71	SJT783	003 410 6001 7	CONTACT
72	SJT3213	003 410 6011 5	CONNECTOR
73	SJT3311	003 410 1819 3	PLUG
74	SJT30540LX-V	003 410 5996 1	CONNECTOR
75	SJT30740LX-V	003 410 5990 7	LUG TERMINAL
76	SJS50578JQ	003 403 7154 8	CONNECTOR
77	SJS51078JQ	003 403 7159 3	CONNECTOR
78	SJS50478JQ	003 403 7221 4	CONNECTOR
79	SJT30545JQ	003 410 8078 8	CONNECTOR
80	SJT30445JQ	003 410 8124 9	TERMINAL PLATE
81	SJT31045JQ	003 410 8152 5	CONNECTOR
82	SJT31047WL	003 410 8084 0	CONNECTOR
83	SJT30947WL	003 410 8083 1	CONNECTOR
84	SJT30539MB	003 410 6148 9	LUG TERMINAL
85	SJT30439MB	003 410 5988 1	LUG TERMINAL
86	SHR9836	016 652 0853 4	PLASTIC SPACER
87 (XA, XB) (PA, PE)	XYN3+C6FZ	005 503 0168 7	SCREW
88	SHD3X36J	016 634 0164 4	BRACING STRUT
89	SJT3101	003 410 3704 5	CONNECTOR

Ref. No.	Part No.	Part Code	Description
PACKINGS			
P1	SPP753	016 978 0504 9	PROTECTION COVER
P2 (EX, EH, EI) (EB, EW, EK) (XL, XA, XB) (PA, PE, EG)	SPG5940	016 971 5074 5	CARTON BOX
P2 (EF)	SPG5941	016 971 5075 4	CARTON BOX
P3	SPS4919	016 977 3267 6	PAD
P4	SPS4920	016 977 3266 7	PAD
P5	XZB10X30A02	016 978 0537 0	PROTECTION COVER
ACCESSORIES			
A1 (XA, XB) ⚠ (PA, PE)	SJP9215	003 402 1437 9	AC PLUG ADAPTOR
A2 (EX, EH, EI) ⚠ (EF, EB, EW) (EG)	SFDAC05E03	003 490 4809 5	POWER CORD
A2 (XA) ⚠ (PA, PE)	SJA168-1	003 490 4122 9	POWER CORD
A2 (XL) ⚠	SJA173	003 490 4161 2	POWER CORD
A2 (XB) ⚠	SJA183	003 490 4873 7	POWER CORD
A2 (EK) ⚠	SJA188	003 490 5443 1	POWER CORD
A3 (EX, EH) (EB, EW)	SQF12985	016 983 5229 8	INSTRUCTION BOOK
A3 (EK)	SQF12986	016 983 5167 5	INSTRUCTION BOOK
A3 (EF, XA)	SQF12987	016 983 5228 9	INSTRUCTION BOOK
A3	SQF12988	016 983 5227 0	INSTRUCTION BOOK
A3 (EI)	SQF12989	016 983 5226 1	INSTRUCTION BOOK
A3 (XL)	SQF12990	016 983 5225 2	INSTRUCTION BOOK
A3 (PA, PE)	SQF12991	016 983 5224 3	INSTRUCTION BOOK
A3 (XB)	SQF12992	016 983 5223 4	INSTRUCTION BOOK

■ EXPLODED VIEWS


1
1-1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21x2
22
23
24
25
26
27
28
28x2
28
28
28